Lectures
ON
ORTHOPÆDIC SURGERY.

Delivered at St. George's Hospital, 1868.

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LECTURE V.
ON CONTRACTIONS OF THE LIMBS.

Congenital contractions of the knee and hip are rare; yet there are found, together with congenital distortions of the feet, retraction of the flexor muscles of the leg, as well as of those of the thigh. Usually both limbs are together affected, and in a similar manner, as in the case now before you. In this instance there is double talipes varus, and both knees are contracted at right angles. (Fig. 15.) But although it is

FIG. 15.

the rule that both knees or both hips shall be contracted, exceptions occur. Such an instance lately came under the care of my colleague, Mr. Adams, where, together with talipes varus of the left foot, there was also congenital contraction of the flexors of the leg, and this was so great that the distorted foot was drawn up almost to the pubes, and was habitually placed at the top of the opposite thigh, on the front of which it lay. The other leg was in a perfectly normal and well developed condition.

Again, you will remember to have seen in Drummond ward a case of contraction of the flexor muscles of the thigh, through which the lower limbs were laid flat upon the trunk, while the feet, which were contracted in a severe form of talipes varus, as I believe is always the case in these distortions, were crossed below the chin. The case is well represented in Fig. 16. The child was brought here from the Belgrave Children's Hospital by Mr. Pick's permission. Not only are the flexors of the thighs and the adductors and extensors of the feet retracted, but also the extensors of the legs, so that the knees remain stiff and immovable. I have never seen or heard of a case of equal severity. Slighter cases have come under my care, and in these also there has been talipes varus and retraction of the extensors of the legs.

Non-congenital contraction of the knee and hip.—It has already been stated that these contractions are occasioned by spastic rigidity through spinal irritation; that they arise from injury to a portion of the nervous system through which paralysis is induced; or that they result from inflammation of the structures which enter into the formation of the limb, by which muscular retraction through irritation is occasioned, or otherwise contraction is induced by inflammatory adhesion. Thus there are three pathological conditions which especially demand attention when treating of contractions of the limbs—namely, spastic rigidity, paralysis, and the result of local inflammation.

FIG. 16.

The muscles of the lower limbs which are especially affected with spastic rigidity are the flexors and the adductors of the thighs, the flexors of the legs, and the extensors of the feet. Cases are, however, occasionally met with—such as that to which I alluded in my first lecture, and which is portrayed in Fig. 1—where not only a limb, but the entire trunk and extremities, appear to be permanently affected with rigid spasm. In the case now alluded to, the rigidity continued after death. The cast, which was taken after death, shows how unchangeably the limbs were fixed in their distorted positions. Every limb was more or less contracted, whether the upper or the lower extremities; and not the limbs only, but the trunk also. The spine was curved as you rarely see a spine curved; and, further, there was wry-neck and strabismus. Less severe cases than this are, of course, more common; and it is not uncommon to find in young children spastic contraction of the adductors of the thighs, with slight flexion of the thighs and legs, and extension of the feet. Such children also suffer from weakness of the muscles of the back and neck; so that the head rolls from side to side, or falls backwards or forwards, and they cannot sit or stand upright. The hands also are wanting in power. Perhaps, however, the slightest and most frequent form in which this affection presents itself is slight talipes equinus or equino-varus, together with weakness of the fingers of the same side.

Congenital contractions of the toes are sometimes hereditary. I know a family in which for three generations every member has been born with contraction of the second toe of each foot. Contraction occurs much more frequently, however, as a non-congenital affection, and for the most part through wearing tight boots. From this cause one or more toes may be contracted, or even they may be doubled under the sole of the foot, and be almost hidden from view.

In a general hospital it is more common to see contraction of a limb as a result of local inflammation than from the causes above mentioned. No period of life is exempt from inflammation of the joints; but there are many varieties of articular inflammation, and the liability to suffer from these several varieties is not alike at all ages. Thus childhood is particularly obnoxious to strumous diseases; but primary synovial inflammations are comparatively rare at this period. In the adult, however, inflammation of the synovial membranes is the rule. No joint occasions more trouble than the knee when it becomes inflamed; it is less painful than the hip, its capsule being less resisting, but, on account of its large and complicated synovial surface, it is more liable to inflammatory action than any other joint, and the effects of inflammation are very frequently disastrous. The

synovial secretion is poured out in increased quantity, and is of a more aqueous quality than in health, causing great distension of the capsule, and extension of the ligaments of the joint. The limb is at this time flexed; for this position allows of the greatest amount of distension of the joints with the least pain. The ligaments become softened and extended; and as the fluid in the joint is absorbed, the head of the tibia undergoes displacement backwards. This was the course of the disease in the case of Brewster M——, who lately left Fitzwilliam ward. He was admitted with a contracted knee, the result of inflammation about the joint. Abscess had formed, and a portion of the head of the tibia was necrosed. This portion of bone was lying loose in the ham, and having been removed, the wound closed. The flexor tendons were then divided, and the leg was gradually extended, and the head of the tibia restored to its normal position, or nearly so.

Occasionally, contraction of the flexor muscles of the leg causes excruciating pain, and especially is this the case when there is commencing ulceration. Some years since I saw, together with Sir Benjamin Brodie and Dr. Metcalfe Babington, such a case. I allude to it, for I never before or since saw an instance of such powerful contraction of the flexors of the leg, attended with such acute pain. Pain was great and incessant, and so severe that this patient was anxious to lose his limb. Every night he swallowed half an ounce of tincture of opium at a dose, and frequently he repeated it, for it never secured for him more than one hour's rest. It was determined in consultation to divide the flexors, and gradually to extend the limb. So soon as the tendons were divided, pain immediately ceased, and in half an hour our patient was asleep, and without the help of opium. There was no recurrence of pain. In the course of six weeks or two months he began again to use his leg.

Contractions of the upper extremity.—In the same manner as that already described, there is also found flexion of the forearm upon the arm, through retraction of the biceps and the brachialis anticus; of the wrist, through retraction of the flexores carpi; and of the fingers, through retraction of their flexors. But of all the various forms of contraction of the upper extremity, none are more interesting and of so frequent occurrence as those of the hand.

Congenital contractions of the fingers and hand are occasioned by thickening and a contracted condition of those portions of the palmar fascia which pass to the first and second phalanges, and which are attached to the ligaments of the articulation between these phalanges. The little finger is very commonly alone contracted. This may seem to be only a trifling affection. It occasions, however, considerable inconvenience; for the fingers cannot be fully expanded, and, consequently, among other things, the performance of instrumental music is seriously interfered with. Occasionally, however, cases are met with where not only accomplishments are interfered with, but where the fingers are so much contracted that the ordinary avocations of life cannot be fulfilled. Such is the case with a girl (E. B——) at this time in Wright's ward, in whom all the fingers of both hands are more or less affected. The second phalanx is, in this instance, bent upon the first. (Fig. 17.) It is a con-

FIG. 17.

genital affection; and it renders this patient so helpless that she cannot gain her livelihood. In this case there is contraction more or less of all the soft structures, as well as of the flexor muscles themselves.

Non-congenital contraction of the fingers and hand arises, for the most part, in a gouty or a rheumatic diathesis, and especially where spirituous liquors are habitually taken in considerable quantities. Yet, even with this foundation, there is usually some inciting cause to produce contraction—some local irritation, together, perhaps, with exposure to cold and damp. The cabman's whip and reins, for instance, appear to act frequently as causes of this common form of contraction. It may also be produced by handling a sword, by wearing a ring, or by pressure in the palm of the hand, such as is produced by the carpenter's or the jeweller's tools, or by leaning heavily on a stick or a crutch. In these cases the fascia in the palm of the hand undergoes chronic thickening. It is a painless affection, and its course is very slow. Contraction, for the most part, commences in that portion of the fascia which passes to the little finger, and this finger becomes somewhat flexed into the palm; and subsequently the ring, middle, and index fingers, and very rarely also the thumb, become more or less drawn down towards the palm, and they cannot be extended. This affection is well shown in Fig. 18. The

FIG. 18.

process of fascia which passes to each contracted finger becomes more and more dense as the finger becomes more contracted; and occasionally instances are seen where the fingers are so firmly closed that it is difficult to introduce the knife beneath the band of fascia, and even where the pressure of the nail excoriates the palm.

(To be concluded.)

ON

THE NUTRITIVE VALUE OF DIFFERENT SORTS OF FOOD.

BY BARON LIEBIG.

(Continued from page 5.)

MEAT contains the albuminates, which are the flesh-producers, in the most soluble form; it is digested in the shortest time, and for its transition into the blood the least amount of work is required. Indeed, the intestine of carnivorous animals is the shortest and most simple of any. The carnivorous animal bolts its food without it being necessary to reduce its size by mastication. The smaller the quantity of the albuminates in vegetables, the more complicated are the organs of digestion of the animals which feed on them. With many, a chewing and rechewing is necessary, in order to separate the food sufficiently for the extraction of the nutritive parts.

Inasmuch as the effect of food depends on its transformation into blood, it must be self-evident that in a given time the effect of the food is in proportion to the rapidity with which its transmission from the intestines to the bloodvessels is effected. Experience shows that with energetic work, for work to be performed in the shortest time, a purely vegetable diet is not compatible.

A woodman in the Bavarian highlands consumes in winter, in six working days, 14 lb. of flour, from 2 lb. to 3 lb. of butter, 1 lb. of bread, and half a pint of brandy. He consumes the flour in the form of a sort of pancake, fried in butter, and chopped into small pieces, for he thus saves a good deal of the work of mastication. The quantity of flour corresponds to 24 lb. of bread daily (100 lb. of flour = 140 lb. of bread), which at 8 per cent. contains 130 grammes of albuminates. Thus he

consumes altogether as much as a well-fed working man. His work is hard, but not requiring energy; after every blow with his axe he can rest as long as he pleases, for the tree stands still, and does not force him to make haste. The man in the Munich brewery requires another diet. The work he has to do is the hardest of all, and only strong men are able to endure it, for the operations follow one another uninterruptedly, and tax the strength of the workman unceasingly. He has no time for resting during his work, which must be done as quickly as possible. According to the quantity of food consumed in seven months by 95 men in a Munich brewery, each man, in meat alone, consumed 120 grammes of albuminates, with bread —altogether, from 160 to 170 grammes daily: thus nearly three-quarters meat, and one quarter bread. And this is easily to be accounted for. The brewer's man consumes in meat a nutritive matter, which for its transition into the body requires a minimum of inner organic work, and he receives in less than three hours, from the albuminates of the meat, a store of strength in his body which enables him to dispose of it at pleasure. The woodman in the mountains must, on the other hand, wait from eight to ten hours until the component parts of his meal act on his body with full effect. Two workmen of the same weight require daily a certain number of grammes of albuminate in their food in order to lift or remove a certain weight a given number of feet; he, however, who is pressed for time, and forced to accomplish his work with greater speed, must have a meat diet, while for the other a purely vegetable diet will suffice.

For a soldier, in time of peace, 125 grammes of albuminate are enough to maintain him in health, of which one quarter must be in the form of meat; but in war time, with fatiguing marches, and laden with 60 lb. of clothing and ammunition, he would, with such a diet, succumb to the over-exertion; he requires at least from 140 to 148 grammes of albuminate, the half of which should be in the form of meat. Thus we may assume that, under similar circumstances, an army of soldiers whose daily rations did not exceed 125 grammes of albuminate, one quarter of which only was in the form of meat, would be beaten by an army in which each man received 145 grammes of albuminate, half of which was in the form of meat: for the effect would be the same as if the latter army had better weapons; its capacity for motion is greater, and it is in a given time capable of greater exertion. We are too apt to forget that the soldier's food is for the man what the powder is for his musket.

All these are very simple and intelligible matters, which may be learned from any coachman; for exactly the same laws obtain for the work we require of our cattle. "Our horses must have oats; the oats must be in them," said an English omnibus driver to Professor Playfair. "If they come from the farmer they are round and plump, for the farmers feed them well. But such horses are not fit for use. They sweat directly, and cannot bear a hard run. *The oats must be in them.*"

What meat is to a man, oats are to horses, or, in Arabia, barley, which of all vegetable fodder contains the albuminates in the most concentrated form, and in a state the most easily transmissible.

With regard to the organic work by which the heat-generating substances are fitted for generating warmth, the same relation exists between starch, sugar, dextrin, fat, and alcoholic beverages. Starch demands the longest work; it requires more time and more additional juices which the stomach must secrete, in order that it may be fitted for passing into the blood, than sugar and dextrin, which are both of themselves soluble in water. Thus the higher value which flour possesses for making bread is explained. By its porosity bread is more easily penetrated by the gastric juice, and is soon amalgamated, because a part of the starch in the flour has already undergone a transmutation into dextrin, or some other similar easily-soluble matter. Fat is slowly received into the circulation, but its effect is of longest duration. Fat food is most fitted for winter, starch and saccharine nourishment for the summer. Beverages abounding in alcohol act, as regards the generation of warmth, the quickest of all.

In the animal body a certain number of degrees of warmth, and a certain quantum of force (strength), must be daily generated, according to exterior circumstances, and as the requirements of one day or one season are greater than in another; and a right nutrition pre-supposes that those component parts of the food which serve to nourish and to warm are contained exactly, or nearly so, in the nutriment in such proportions as the body requires. An extra amount of warmth-producing nourishment could not make up for a paucity of strength-producing substances; it would be of no effect in nourishing the body, and would only burden it. An extra amount of strength-producing food would, beyond a certain limit, not add strength, because in the individual only a certain measure of strength can be generated.

Economically considered, an acquaintance with the right relations of the warmth- and strength-producing component parts of our daily food is of the greatest importance. Long before science had furnished breeders with a sure basis to go upon, the husbandman endeavoured to find out the relative nutritive value of his different sorts of fodder, and it is to this endeavour that we owe the solution of some of the most wonderful and most important physiological problems.

The food of men and of animal scontains, namely, the albuminates, which are necessary for producing flesh and strength, and the heat-producers (starch, sugar, and fat) in very different relative quantities.

The seeds of the cereals—wheat, rye, barley—contain for every ten parts albuminate fifty to fifty-five parts of starch. A similar proportion (one to five) of the albuminates to the digestable warmth-generating substances is also found in good meadow hay. In potatoes, rice, turnips, &c., this proportion is quite different. In potatoes, for 10 parts albuminate are 85 and often 90 parts of starch; in rice 120; in peas, on the contrary, only 25 parts; and in rape-seed flour there are but 13 to 14 parts of heat-generating substances. Be the state of the animal what it may, there is for satisfying all its wants but one right proportion of the albuminates, heat-producing matters, and nutritive salts to be adopted. But this proportion varies according to circumstances, and must be altered as the breeder or grazier has this or that aim in view. If, for example, he desires to obtain weight by his system of feeding, then the proportion of the albuminates in the fodder must be increased; and that fodder is, of course, for him the best which enables him to produce a maximum of meat, milk, and wool at the smallest expenditure for nourishment.

It is clear that if an animal—a pig or a sheep—requires in its food 10 oz. albuminate, and 55 oz. heat-generating matter, for its nutrition, it will, if the 10 oz. albuminate be given in the form of potatoes, have to eat fifteen pounds of steamed potatoes, and in these 95 oz. to 100 oz. of starch—thus, 40 oz. to 45 oz. of heat-generating matter more than the animal can turn to account. These 40 oz. of starch have a certain nutritive, and for the breeder a pecuniary, value; which, however, are in this case wholly lost to him, as starch in manure does not add to its value. A similar loss would accrue if the animal were fed exclusively on beans or peas. In 50 oz. of peas the pig would get 10 oz. of albuminate, but only 12½ oz. of starch, 42½ oz. therefore less than it required. For the perfect nutrition of the animal somewhat more than 100 oz. of peas would be required, and therein 10 oz. more albuminates would have to be given, which are ineffective for producing flesh, because they would be used up instead of the missing starch, in order to generate warmth.

Thus it will be easily understood what an advantage to the breeder it must be, since science has made him exactly acquainted with the component parts of fodder and their relative worth, to be enabled by properly mixing food to obtain, without loss of means expended, the most favourable results. It teaches him that with a mixture of 7¼lb. of steamed potatoes, and 25 oz. of peas, he can feed his pig well, and turn to the best account the whole quantity of albuminates in the peas and all the starch. In this wise the cattle breeder makes up for the missing hay by a blending of other fodder which he can command, such as turnips, potatoes, peas, rye, straw, clover, rape-seed cake, and peas-flour. What he has to do is this: he must so mix them that they are really a surrogate for the nourishment contained in the hay; and by finding out the fitting proportions of their component parts—fitting as regards the aim to be attained—the most extraordinary results have been arrived at in breeding, fattening, and in producing milk and wool.

The chief means of subsistence—grass or hay—provided by nature for herbivorous animals contains the albuminates, warmth-producing matter, and the nutritive salts in such admixture that by their co-presence in the process of digestion and nutrition each of these elements produces the full effect belonging to it; and when the breeder, who has no hay, but other fodder, makes up a mixture of food which in its nutritive capability supplies the place of the missing hay, he in no wise alters the nutritive value of the food thus prepared.

In the nutrition of men, however, totally different relations are to be taken into account. By preparing his victuals by means of boiling, baking, roasting, by turning the corn into

flour, man changes not only the condition and the nature of his food, but very frequently its composition also; and, in many cases, its nutritive value is notably changed by the process of preparation. This is principally effected by the change in the proportion of the nutritive salts which his food contains in its natural state.

Although the part which these salts play in the process of digestion, in the formation of blood, and in general assimilation, has been known for more than twenty years, with the most positive certainty (see "Chemical Letters," vol. ii.), it seems as if in practice the knowledge of it were still ignored.

The importance of the albuminates and the heat-generating matters is recognised, it is true; also that the first, in comparison with the others, have a higher value. It is possible, indeed, in the process of nutrition to supply the place of the heat-generating substances, such as starch, sugar, and fat, by means of meat; but not *vice versâ*, because the heat-generating substances are quite incapable from their composition of serving to aid in the structure of the body, and therefore it may be said that the albuminates possess a pre-eminent value. On the other hand, the nutritive salts, without whose co-operation the albuminates, as well as the heat-generators, would be quite incapable of giving nourishment, are generally hardly taken account of; and we read long dissertations on food and nutrition in which everything under the sun is spoken of except the nutritive salts, and in which even the words "nutritive salts" are not to be found, just as if they had no existence.

(To be continued.)

SCIENTIFIC INVESTIGATION INTO THE CAUSES OF CHOLERA.

(Continued from p. 4.)

II. REPORT OF INTERVIEWS WITH PROFESSOR DE BARY, AT HALLE.

BY

DR. D. DOUGLAS CUNNINGHAM

AND

DR. TIMOTHY LEWIS.

ASSISTANT-SURGEONS IN H.M. INDIAN AND BRITISH SERVICES.

PROFESSOR DE BARY gave us

First. *Some general instructions as to experiments in the cultivation of fungi, and the conclusions to be derived from such experiments.*

1. Observations on development in order to be of any value must be made frequently, in some cases hourly.

2. Only a very little material should be employed at a time, in order that the field under observation may be clear.

3. One must actually see that a given growth proceeds from a given origin, and not conclude, when two or more forms exist in the same preparation, that they necessarily have a developmental relation to one another, even although at the beginning of the experiment there appeared to be only one kind of element present.

4. As a general rule never believe anything but what is seen, and never found conclusions on mere probabilities.

Second. *Apparatuses necessary for experiments on cultivation and development.*—These Prof. de Bary prefers of as simple a nature as possible, considering that the less complicated any apparatus is the fewer sources of fallacy does it involve. The apparatus which he recommends is as follows:—

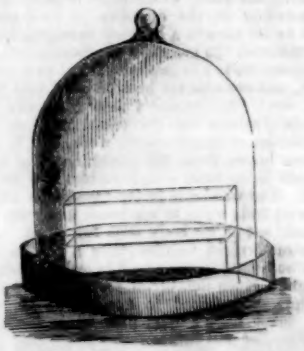
(*a*) Apparatus for common cultivations.

1. Means of protection from dust and other foreign bodies. This consists of three parts—A common glass bason; a bell-glass fitting into this; a small metal stage suitable for bearing object-glasses, &c.

When the above apparatus is employed the bason is half filled with water, mercury, permanganate of potassium solution, &c. The stage is next placed in it, and the bell-glass is finally added, so that, dipping into the solution all round, it effectually isolates the stage and anything on it from the external air. (Fig. 1.)

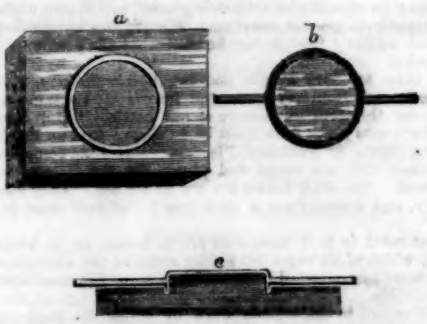
2. Means of cultivation: Fluids of various natures suitable, from their chemical constitution, for affording nourishment to fungi. Object-glasses, watch-glasses, &c., on which such fluids, and the fungi to be developed, may be placed. Before introducing any preparation into the isolation apparatus, a careful microscopic examination of it must be made in order to learn its geography, in order to be able to secure the detection of any special body in it at a later period. After a cultivation is fairly started, all that remains to be done is to make repeated careful examinations in order to trace the steps in the development of the bodies under investigation.

FIG. 1.



(*b*) Apparatus for permitting continuous microscopic observations for development, the same preparation remaining for days under the microscope. This consists of two parts—viz., a thick glass plate, with a deep circular groove ground in it; this groove has (at the opposite extremities of one of its diameters) its edges beveled off in some degree. (Fig. 2, *a*.) A thin glass cover, with its edges turned down and fitting into the groove; connected with this cover are two tubes (one at either side), allowing the entrance of a continuous supply of purified air, if this be desired. (Fig. 2, *b*.)

FIG. 2.



In applying this apparatus to practice, the fungi to be cultivated are placed on the portion of the plate which is surrounded by the groove. The cover is now fitted on, and the groove and the mouths of the tubes filled with some fluid so as to secure isolation. The whole apparatus is now placed on the stage of the microscope, and every step in the development of the bodies under examination can be followed without at any time removing them from their position. (Fig. 2, *c*.)

As to the microscopic powers necessary in such observations on the development of fungi, Prof. de Bary considers that, as a general rule, moderate powers are quite sufficient.

In experiments on development, certain reagents are quite indispensable. Those most necessary are (1) ether, (2) absolute alcohol, (3) solution of iodine, (4) glycerine, and (5) sulphuric acid.

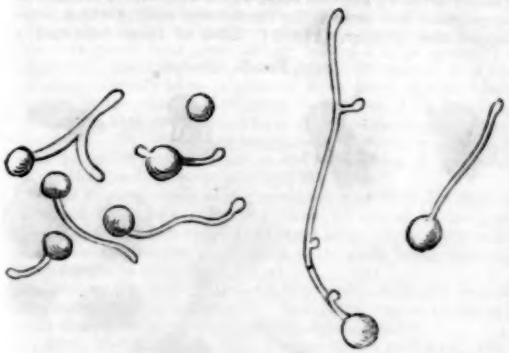
Third. *Cultivations illustrating the employment of apparatus, as well as the relations which various fungal forms bear to one another.*

1. Cultivations illustrative of the development of Mucor Racemosus. The material cultivated had been obtained directly from Prof. Hofmann of Giessen, who is the describer

of the species. This had two advantages: 1st, it was undoubtedly true mucor racemosus; and, 2nd, it was derived from a place which cholera had not visited.

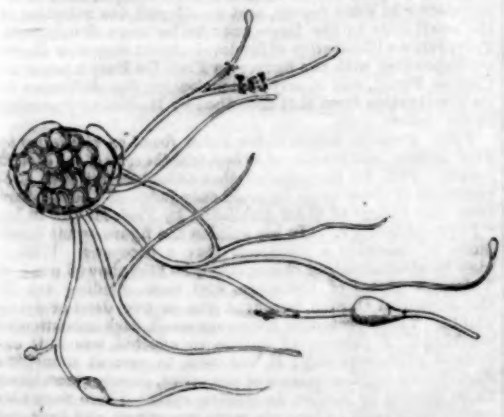
Some of this material was, on the 7th October, set for development in a watch-glass containing some solution of grape-sugar. Previous to preparing the cultivation, some of the material was examined microscopically, and was found to consist of mycelial threads, sporangia containing spores, and numerous free spores. On examining the cultivation on the following day the same elements were visible, but many of the spores had germinated, sending out one or more fine filaments, which in some cases were slightly branched. (See Fig. 3.) The next day's examination showed

FIG. 3.



considerably increased development in the filaments, which were now much branched and frequently marked by dilatations of a more or less round or oval form. In some places filaments were seen proceeding from spores contained in capsules which were still entire. (See Fig. 4.) On this point Prof. De Bary remarked that though, as a general rule, the

Fig. 4.



sporangia ruptured before the germination of the contained spores, yet it frequently happened that these germinated within an entire sporangium, thrusting out their filaments through its walls. (See Fig. 4.)

The dilatations noticed above are analogous to the tubers of the potato, being capable of giving origin to new individuals after the rest of the plant to which they belong has died. They vary extremely in size, presenting in this a marked contrast to spores, which are very constant in this respect.

At this stage of the proceedings small portions of the material from the watch-glass were placed on two object-glasses, and, after being carefully examined microscopically, introduced into the common isolating apparatus.

On the fourth day of observation (the third of cultivation), development of the young plants was seen to have advanced greatly. The dilatations were now no longer solitary, but were arranged in chains, and were also much increased in size. Many of the dilatations were seen to have a double contour (see Fig. 5), due to the contraction of the

FIG. 5.

contained protoplasm, caused by osmosis arising from the density of the surrounding medium. This double contour disappeared on the addition of a little distilled water to the medium. In the mycelial filaments, and more especially in the dilatations, were numerous globular bodies. These were in some places disposed with a certain amount of regularity, while in others they were irregularly heaped together. The nature of these bodies (see Fig. 6) had now to be ascer-

FIG. 6.

tained. With a view to this, ether was added, and their fatty nature clearly demonstrated by their disappearance under its influence. At this date young sporangia appeared for the first time. They were seen in various conditions: some borne on filaments; others detached; and others in which the peridium had ruptured, with partial escape of the spores, or even totally disappeared, leaving only the columella attached to the extremity of the filament.

It was in some cases a matter of some difficulty to distinguish a detached sporangium containing spores from a dilatation containing oil-globules. Here again, however, the application of ether settled the question; the oil-globules disappearing, whilst the spores remained unchanged.

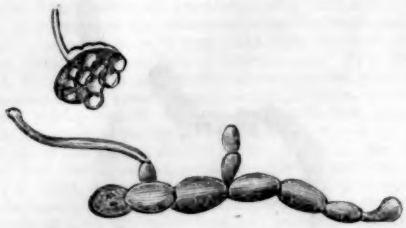
In the same field as the mucor plants, some specimens of penicillium were visible; but in no case could the same plant be seen to bear mucor sporangia and penicillous heads. Dr. De Bary here, again, insisted on the necessity of only drawing conclusions as to development, and the identity of various forms where one could trace them unmistakably arising from the same spore.

All the specimens of mucor growth which had as yet appeared were colourless; and Prof. De Bary now proceeded to take means to secure coloured specimens. Whilst doing this, he remarked that, as in higher plants so in fungi, colour is a matter of very minor importance, and one which cannot always be caused to vary at all. In mucor racemosus, however, a brown or yellowish colour can almost always be obtained empirically by the addition of an am-

moniacal salt to the substratum of the cultivation. With this end in view, a little carbonate of ammonia was added to the fluid of the cultivation contained in the watch-glass.

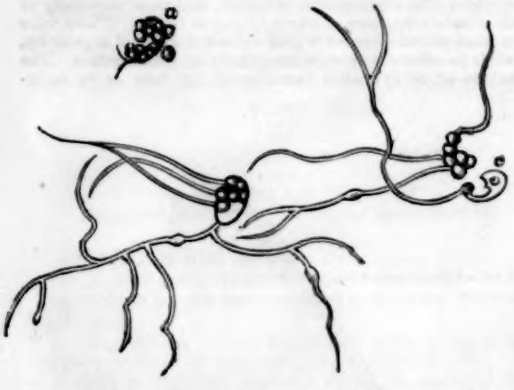
On the following day the filaments and dilatations of mucor were found to have already begun to acquire a brownish-yellow colour, and to present many forms closely resembling those figured by Hallier as the results of the cultivation of cholera stools under like circumstances. (See Fig. 7.)

FIG. 7.



In following out the observations of the same day (October 13th), Professor De Bary isolated in some degree an aggregation of spores and a portion of their containing cyst, which, taken together, were of such a form (see Fig. 8, *a*)

FIG. 8.



as to be easily recognised again after the geography of the preparation had been clearly ascertained. This preparation was now introduced into the cultivating apparatus. On examining it twenty-four hours later, the spores were seen to be still in connexion with their cyst, but to have sent out numerous branched filaments, which were marked by dilatation, and formed an abundant mycelium. (Fig. 8.) More nutritive fluid was now added, which caused the spores to swell out, rupture the cyst more completely, and escape from it, leaving it empty, with the exception of a single ungerminated spore, which remained within it. (Fig. 8.)

The specimens undergoing coloration now showed various tinges of brown and yellow, and an abundant development of oil-globules. They also afforded examples of a peculiar form of gemmation often occurring in mucor dilatations.

General conclusions resulting from the above series of observations.—1. Mucor spores, on germinating, invariably give rise to plants of mucor, whether they be exposed to air or not, and whatever be the chemical reaction of their surrounding medium. But—

2. The relative proportion which ordinary mycelial threads, chains of saccules, and sporangia bear to one another varies with these accidents.

3. Coloration may be induced at will by the addition of ammoniacal salts to the soil of the cultivation.

4. The spores may germinate either before or after the rupture of their containing cyst or sporangium.

5. When, in any cultivation, various forms of fungi are observed in the same microscopic field, it does not follow that they have a common origin; mere coexistence without organic connexion affording no grounds for such a conclusion.

6. That the use of reagents is absolutely necessary in order to escape from constant sources of fallacy.

Fourth. *Observations on Urocystis occulta.*—Prof. De Bary considered that a familiarity with this species was of importance, considering that Prof. Hallier had in his publications maintained that the fungus which he found on rice-leaves, and which he considers peculiar to cholera, was a urocystis. He accordingly showed specimens of various plants affected with urocystis, remarking, in passing, that rye was the only grass known to be affected by a species of this genus—viz., urocystis occulta. A specimen of rye so affected was next taken, and some of the fungus removed from it, and examined microscopically. It now appeared to consist of brown angular cells, which were either solitary or aggregated into masses, the constituent cells of which overlapped one another. (Fig. 9.) Each of these cells had a

FIG. 9.

varying number of cellular processes connected with it, which were rendered very manifest on the cautious addition of strong sulphuric acid. This reagent destroyed the colouring matter in some degree, and so allowed the relations of the small cells to the large ones to be more clearly seen. Preparations illustrative of its development were now shown corresponding with the figures in Prof. De Bary's paper on Cholera Fungi, and clearly demonstrating the difference in its germination from that described by Hallier as occurring in his cholera cysts.

Fifth. *Probable nature of the bodies found on rice-leaves by Prof. Hallier, and considered by him to be the cysts of the cholera fungus.*—Prof. De Bary stated that as he had not seen preparations of these cysts he could only judge of their nature from the figures of them published by Prof. Hallier in his "Phyto-pathology." In his opinion the figure seems much more to resemble a pleospora than a urocystis. With a view to substantiating this opinion, he first showed some of Tulasne's plates of Pleospora, and then, sending out to the Botanical Garden, procured one or two dead or dying plants. These presented numerous small, dark subcuticular markings. A portion of cuticle so affected was now examined microscopically: it was seen to present numerous dark-brown cellular masses of pleospora, closely resembling those figured by Hallier as cholera cysts. There were also numerous mycelial filaments, some free spores, and here and there a few detached cells adhering to one another, and presenting a faint resemblance to urocystis, but without its cellular projections. As Prof. Hallier has now abandoned his views as to the similarity, if not identity, of his cholera cysts and urocystis, it is unnecessary to enter farther into the matter here.

Sixth. *"Micrococcus" and yeast-cells.*—On examining the mucor-cultivation on the 8th October, Dr. De Bary pointed out numerous small cells which were either separate or in chains, and also numerous aggregations of smaller bodies (appearing as minute granules × 300), some of which were in active movement. The larger cells he stated to be yeast-cells, whilst the smaller were bacteria or schizomycetes, which are included by Prof. Hallier under his comprehensive term "micrococcus."

Dr. De Bary next proceeded to discuss the nature of yeast-cells. He defined them as being "fungal cells immersed in fluid, and increasing by a repeated process of gemmation; the new cells either becoming detached, or remaining connected in chains of various extent. Such cells are derived from various fungi, and closely resemble one another in appearance. They differ from one another, 1st, as regards their physiological action, as shown by the various kinds of fermentation which they induce; and, 2nd, as regards the fungi developed from them, under circumstances favourable to the normal development of the species."

Experiments with a view to determining the species to which a given yeast-cell belongs are beset with many difficulties. Even if a single cell be isolated, it is almost impossible to be certain that it is a boná-fide yeast-cell, and not a spore which has become mixed with the yeast. On this point Prof. De Bary remarked that "modern mycology" derives yeast from everything; taking a large quantity of material, and concluding when yeast-cells appear in it that they necessarily have originated from some special constituent in the material, whereas the spores of various fungi may have been present and have simultaneously given origin to yeast-cells. "As well might one introduce a stone with the material, and conclude on the appearance of yeast-cells that they had taken origin from the stone."

The Bacteria were next examined; and Prof. De Bary explained his views regarding them, as stated in his paper on Cholera Fungi, entering at some length into the grounds on which he founds his opinion as to their being algal and not fungal in their nature.

During the next few days both yeast-cells and bacteria increased greatly in quantity; but there was no evidence of the development of the one form into the other.

Prof. Hallier states that micrococcus is produced, whenever a spore is introduced into a suitable fluid, by a peculiar species of development. Prof. De Bary believes that this is not the case.

With regard to this question, Prof. De Bary stated that no doubt, if spores are sown (even in distilled water), bacterial forms are found on examination, either at once or at some later period. If the distilled water employed have been kept for any time (however carefully), bacteria will be visible at once; for it is only freshly-distilled water that is free from them. Prof. De Bary stated that he has never seen the formation of micrococcus from the spores of any fungus, though he has often seen bacterial forms in the fluid in which such spores may be. He has made careful observations on penicillium (one of Hallier's micrococcus-forming fungi), and has seen: 1st. Cases in which the spores germinated. 2nd. Cases in which they did not germinate. 3rd. Cases in which they ruptured. In none of these cases has he ever seen the formation of micrococcus. When spores are cultivated, they either germinate, or do not germinate; and in either case schizomycetous forms appear sooner or later. If the spores do not germinate, they may burst, and the granules of the protoplasm escaping may mingle with the surrounding fluid and schizomycetes, and of course the latter tend to accumulate to the greatest degree in the neighbourhood of such granules—i.e., in the situation where they can obtain most nourishment. Whenever a cultivation of spores is undertaken, they are almost certain to carry with them the germs of bacteria, schizomycetes—i.e., as these bodies naturally exist in greatest abundance in the same situation as are suitable to fungi, and from the rapidity of their multiplication, one or two germs will soon give rise to an immense number of individuals.

Seventh. *Oidium lactis and "Cylindrotænium choleræ Asiaticæ."*—Professor De Bary considered that an acquaintance with oidium lactis and its forms was desirable on account of Thome's observations on the so-called cylindrotænium choleræ Asiaticæ. (Vide Virchow's "Archiv," Bd. xxxviii.) Accordingly he showed specimens of oidium, and set spores of it, to be developed for future examination. The specimens showed it in various stages of growth and development (Fig. 10, *a*), showing mycelium and spores, some of which adhered to one another in zig-zag chains, while others were separate and scattered over the field of the microscope. Dr. Thome's figures of cylindrotænium were now compared with these forms, and a most close accordance was at once manifest between them.

In connexion with this subject, Professor De Bary remarks on the extreme frequency of the occurrence of oidium lactis, and mentioned that there was no species more troublesome in cultivation experiments, as, from its very rapid development, it constantly interferes with the growth and obscures the observation of the forms for which the cultivation was undertaken.

FIG. 10.

The cultivation of oidium spores within a few hours showed commencing germination (Fig. 10, *b*), and on the following day presented numerous beautiful examples of mycelium and chains of young spores.

ON

THE TREATMENT OF "EPILEPTIFORM" NEURALGIA IN ITS EARLIER STAGES.

BY FRANCIS E. ANSTIE, M.D., F.R.C.P.,
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THERE is no subject on which the lamented Trousseau shed more of the light of genius than that of the terrible kind of facial neuralgia to which he gave the name "epileptiform." The picture of that disease which came from his hands is wonderfully vivid, and wonderfully like the original, even if somewhat too sharply defined; and there is suggestiveness in the view which led him to call the disease "epileptiform," although the name itself be, as it unquestionably is, unfortunate. It was a pity, namely, to tempt ordinary thinkers to dwell more closely on the spasmodic manner of onset of the pains than on the remarkable constitutional and family history which distinguishes the victims of the disease; but, on the other hand, the word "epileptiform" may serve to call attention to the real and important family connexion which there is between epilepsy and certain forms of facial neuralgia.

As regards the treatment, however, of this dreadful disease, Trousseau appears to me to have done the reverse of good by the precepts which he laid down. I say this with the diffidence one must feel in criticising so able a teacher; but also with a firmness of conviction that has been produced by undeniable, observed facts. Trousseau describes, with the brilliant eloquence so peculiarly his own, the tragic prospect which the sufferer from spasmodic tic has before him; how hopeless it is that he should obtain a cure, and how certain that any relief obtained by remedies will be followed by a return of all his sufferings. He lays it down as an absolute law that we are to expect nothing but a temporary respite or alleviation; and he then proceeds to say that this minor amount of good is to be procured by very large and increasing doses of opium better than by any other means. I observe that various later writers have followed in the same sense; but I am so en-

tirely convinced that the principle laid down is wrong, that I shall here make a protest, and give my reasons as shortly as possible.

There is no doubt that Trousseau's description of spasmodic facial neuralgia, as a disease hopeless of cure, was, at the moment, nearly correct. He is evidently speaking of a malady quite different from the milder neuralgiæ which may occur at any time of life—a neuralgia which is rare, is confined to certain highly neurotic families, and which, among those families, only attacks a limited number of individuals who have passed the prime of life and entered upon the period of organic degeneration. The pain is of frightful severity, and is all the more difficult to bear because of the agonising suddenness with which it darts through the affected nerve, perhaps aroused by some trifling and necessary muscular movement, such as mastication. That very large doses of opium are required to produce any great impression on the disease, if the medicine be given by the stomach, is also perfectly true. These doses must be continued, and rapidly increased, with the unfailing effect of seriously disordering the functions of digestion and assimilation. And, after all, the best result attainable is, that for a few weeks or months there may be a notable diminution of the severity of the pain; but with the certainty that, sooner or later, it will revive in all its intensity, and that then neither opium nor anything else will produce any perceptible impression upon it. The remainder of such a patient's life is rendered additionally miserable, in most cases, by a total derangement of digestion and consequent failure of nutrition.

Now I believe that a very much better result than this may be obtained if the malady be treated, from an early stage, according to the following plan:—1. Counter-irritation of a peculiar kind. 2. Nutritive tonics. 3. Subcutaneous injection of morphia, or of atropia, according to circumstances.

1. Counter-irritation, to be useful in epileptiform facial tic, should not be applied to the branches of the fifth, but to those of the occipital nerve, at the nape of the neck. A blister in the former situation is as often hurtful as useful: in the latter, it is sometimes strikingly effective in gaining a short respite. And this is of very great consequence in this awful disease; for the mere fact of such pain being allowed to continue is itself of the worst possible omen. 2. The assiduous use of cod-liver oil, or of some fatty substitute for it, should be insisted on from the first, and is of the highest consequence. 3. Subcutaneous injection places us in a totally different position towards the use of opium in spasmodic tic. There is no longer any excuse for the use of enormous doses of opium from the first. It will be sufficient to commence with the use of one-sixth of a grain of morphia twice daily, increasing this, if necessary, to one-fourth and one-half a grain; and, in rare cases, to one grain. If this produces, along with the other measures, a notable remission of the pain, it should be cautiously and steadily decreased, as circumstances may admit. In cases where morphia fails, atropia may be tried, in doses commencing at one-sixtieth of a grain. The injection of a less quantity than this would probably be useless in severe tic.

Hopeless as was the cure of the form of neuralgia which I have now described, under Trousseau's plan, or any other which might be directed to the object of deeply narcotising the patient, the prospect is by no means so cheerless when the subcutaneous injection is employed, with the precautions above mentioned. Although I cannot say that I have ever seen a positive and complete cure of a facial neuralgia setting in under the conditions which have been described as peculiar to this disease, it is certain that the experience of those who have used the subcutaneous method extensively has proved that the attacks may be kept at bay, and their severity greatly mitigated when they occur; with this general result—that the setting in of a facial tic in the latter period of life, even in a patient whose family and constitutional history is of the worst augury, is no longer a fatal warning of life-long and scarce endurable misery. The economy in the necessary use of opium effected by the use of hypodermic rather than gastric administration is enormous; and this not merely for the purpose of producing a given effect by a single dose, but also (which is most important in regard to the preservation of digestion and nutrition) with regard to the rate of increase in the doses.

In the above remarks I have only referred to methods of treatment which are within the reach of every practitioner. It is necessary to state, however, that for those who are so circumstanced as to be able to provide themselves with proper apparatus for the generation of a constant galvanic current, the prospects of effecting good in even the most seemingly hopeless cases of spasmodic facial tic are very greatly increased. Not to dwell, now, on my own more limited experience, I maintain that it is impossible for any candid person to study carefully the treatise of Benedikt* without coming to the conclusion that we have in the constant current a remedy capable of effecting much more, in these severe cases, than any treatment by drugs, or any other means. A low-tension current from a Daniell's battery (using from five to fifteen cells, according to circumstances) applied daily in *séances* of a few minutes, appears sometimes to entirely arrest facial neuralgia of the worst type, and commencing under the most unfavourable omens. Especially may we indulge hope, as it seems to me, in regard to the results which may be obtained from the galvanisation of the sympathetic, in cases which would otherwise afford no rational hopes of more than the most trifling amendment. But on this point I have not space to dwell at length, and any very condensed account of this mode of treatment would be likely to mislead. To those who possess the requisite preliminary knowledge of electricity and electro-physiology, and also the opportunities of providing themselves with the somewhat expensive and troublesome luxury of a really effective constant battery, I would urge the necessity of a careful study of the English treatise of Althaus, and the German treatises of Remak, Benedikt, and Meyer, upon the medical uses of electricity. They will find facts therein which will at once arrest their attention, and engage them seriously in a most important branch of the therapeutics of nerve-pain.

Wimpole-street, January, 1869.

PAPERS
ON
THE THERAPEUTIC ACTION OF DRUGS.

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I.—ACONITE AND ITS PREPARATIONS.

OF all the drugs we possess, there are certainly none more valuable than aconite. Its virtues by most persons are only beginning to be appreciated, but it is not difficult to foresee that in a short time it will be most extensively employed in the diseases immediately to be noticed.

As external applications, the liniment or ointment is used to relieve pain. They appear to possess power over pain of different kinds. In the neuralgias of the brow or face these applications are sometimes of the greatest use, and often relieve, either permanently or temporally, the distressing pain of these complaints. But while in many instances their effects are immediate and permanent, yet it must be confessed that in the majority of cases the pain is unaffected. Neither can we, with our present knowledge, predict with any certainty the cases in which the application will be useful, or those in which it will fail. This much, however, is ascertained, that those neuralgias which depend on decayed teeth or diseased bone, or on tumours pressing on the nerves, are beyond the control of aconite. But these are not the only forms of neuralgia over which aconite cannot prevail. No doubt in some instances the failure can be explained by the badness of the preparation; but even when this is excellent, it is not uncommon for the pain to remain unabated after the application. As, however, no harm can possibly follow their employment, they should always be tried; and if unsuccessful, then recourse can be had to other modes of treatment. If aconite succeeds at all, it will succeed at once; and hence, if no relief is speedily obtained, it is useless to continue its employment. The preparation should be sufficiently strong to produce

* Elektrotherapie. Von Dr. Moritz Benedikt. Wien., 1868.

decided numbness and tingling in the skin over which it is rubbed; and, where of service, these sensations replace the pain, which does not return when the effects of the aconite have worn off.

The ointment and liniment should be applied with friction, which very greatly heightens their activity. Of the ointment, a piece the size of a pea or bean should be rubbed into the skin till it has disappeared. Care should be taken while using these powerful and poisonous applications that they are not rubbed into wounds or cracks of the skin, nor brought into contact with absorbent tissues, such as mucous membranes and the conjunctiva of the eye. Spinal irritation and intercostal neuralgia may in many instances be removed by aconite ointment, and sciatica sometimes yields to the same remedy. The former complaints are better treated by the belladonna preparations.

When employed internally, the following sensations are experienced, the graver appearances and symptoms occurring only when a considerable dose has been taken. There is first a feeling of warmth at the pit of the stomach, with sometimes nausea and vomiting. The feeling of warmth spreads over the body, and there is soon perceived tingling of the lips and tongue and adjoining parts; the uvula with the tongue feels as if it were swollen, and too large for the mouth, and deglutition is frequent. If the dose has been a large one, the tingling and numbness are felt in the tips of the fingers, and thence spread over the whole body, and are accompanied by diminished sensibility and some muscular weakness, which, if the dose is a considerable one, becomes extreme, and is one of the most prominent and important symptoms of the drug.

On the circulation and organs of respiration its action is most noteworthy. With moderate doses the number of the heart's beats are much lessened, and may sink to 40 or 36 in the minute. After a larger and dangerous dose, the pulse rises in frequency, and may become irregular. With some persons such irregularity follows even a small quantity of the medicine. Whether the frequency be increased or lessened, the pulse always loses strength, and hence the circulation is retarded. The effects on respiration are very similar. By moderate doses the breathing grows slower; but after large and poisonous quantities it is often short and hurried.

During the administration of aconite cutting pains are often complained of in the joints and other parts of the body, and there sometimes breaks out on the skin an eruption of itching vesicles. Delirium occurs in some cases, but often after fatal doses the mind remains clear to the last. In some cases which have ended in death there has been found blindness, and deafness, with loss of speech.

When death is produced by this drug, the muscular weakness is extreme, and frequent faintings occur. Death from aconite appears to be due to syncope. On account of its power to diminish sensibility, aconite has been used internally in various painful diseases; but other remedies have, for the most part, superseded it for the relief of pain.

It is on account of its power to control inflammation and subdue the accompanying fever that aconite is to be the most esteemed. The power of this drug over inflammation is little less than marvellous. It can sometimes at once cut short the inflammation. It does not remove the products of inflammation when these are formed, but, by controlling the disease, it prevents the formation of these, and so saves the tissues from further injury. It is therefore in the early stage of inflammation that the good effects of this plant are most conspicuous; still, although the disease may have progressed to some extent, and have injured the organs by the formation of new and diseased products, while the inflammation is extending aconite does good. It is useful wherever there is acute inflammation of any tissues of the body. The good it accomplishes can be shown both by the amelioration of the symptoms, and, still better, by the changes it effects in the inflamed tissues when these are visible, as in pharyngitis, tonsillitis, &c.

As might be expected, the results of aconite are most apparent when the inflammation is not extensive, or not very severe, as in the catarrh of children, or in tonsillitis, or in acute sore-throat. In these comparatively mild diseases, especially if the aconite be given in the earliest stage of the inflammation, when the chill is still on the patient, the following consequences will very generally be witnessed:—In a few hours the skin, which before was dry, hot, and burning, becomes comfortably moist; and, in a little time longer, it is bathed in a profuse perspiration, which may be so great that drops of sweat run down the face and chest. With this appearance of sweat many of the distressing sensations—such as the restlessness, chilliness, or heat and dryness of the skin—are removed. At the same time the quickened pulse is much reduced in frequency, and, in a period of twenty-four to forty-eight hours, it and the temperature have reached their natural state. It is rare that a quinsy or acute sore-throat, if caught at the commencement, cannot be disposed of in twenty-four to forty-eight hours. The sweating may continue for a few days after the decline of the fever on slight provocations; but it then ceases.

The appearance of the inflamed part also exhibits, in a striking degree, the beneficial effects of the drug. Thus large, livid, red, glazed, and dry tonsils may often in twenty-four hours have their appearance completely altered. If the medicine has been given before much lymph has been formed in these organs, in the time named the swelling and most of the redness will have disappeared, and the mucous membrane will have that look which proves the acute inflammation to have subsided—namely, it has become moist, and is bathed with mucus or pus. If just at this stage some strong astringent—such as glycerine of tannin—be applied, most of the remaining diseased appearance and the pain, if it continues, will be removed. Such are the visible effects of aconite on inflamed tonsils, &c.

These statements are not exaggerations; but the simple truth, as may be witnessed by those who will employ the aconite in the way to be immediately mentioned.

Its effects on catarrhal croup are as conspicuous. In a few hours the urgent dyspnœa is removed; and in a short time longer the fever is subdued. Severe colds, in which there is much chilliness with great aching of the limbs, with a hot, dry skin, and quick pulse, may be equally well treated by aconite. So, indeed, may all the slighter forms of inflammation.

The effects of this valuable drug, though not so rapid, are equally important on pneumonia, pleurisy, and the graver inflammations. These diseases may be considerably curtailed, and made much milder, if aconite is employed.

Its influence on inflammation has been ascribed by most observers to its power over the heart; and, as they truly point out, the remedy is found to be of most use in the sthenic forms of the disease; and where there is great weakness and the heart beats feebly, unless care is taken, it may do harm. The method of employing the drug has much to do with its success. As already said, it should, where possible, be given at the very beginning of the disease. Every hour is of importance; the use of the medicine should never be delayed. Of the tincture, half a drop, or a drop in a teaspoonful of water, should be given every ten minutes or quarter of an hour for two hours, and afterwards be continued every hour. If there be much prostration, and the pulse be feeble and weak, a still smaller dose will best be given.

It is not inappropriate to mention here what signal service the thermometer may render in enabling us to decide whether aconite should be given or not. When called to see a patient, and when the symptoms and physical signs are not sufficiently developed to decide whether an acute inflammation of some deep-seated part has set in or not, this instrument will often decide the doubt. No acute inflammation can exist without preternatural heat of the body. Hence, if in a doubtful case the temperature, after a careful investigation, be found natural, the case is not one for aconite; while, on the other hand, if the symptoms, although doubtful, indicate an inflammation, the presence of an increased heat of the body will very considerably add to the probability of its existence, and will so indicate the advisability of employing aconite.

Another instance may be mentioned. After scarlet fever, as is well known, acute inflammation of the kidneys is very liable to occur. This would at once be indicated by a rise in the temperature of the body. It is therefore desirable to direct the friends of such patients to observe, night and morning, the temperature; and if this should rise beyond limits of health, they should at once commence the administration of aconite, and not allow some hours to elapse before the patient can be seen by the medical attendant. It is true the fever may depend on some other complaint than

inflammation of the kidney; but it will even then probably be inflammatory in character, as from gastric catarrh, overfeeding, and the like, in all which cases the aconite will be equally efficacious.

Whether aconite is of use in the fever of acute specific disease, as scarlet fever, measles, &c., is not so certain as its power over inflammation. But although there may be some doubt whether this remedy can lessen the severity of the fever of the acute specific diseases, there is no doubt it can control and subdue the inflammatory affections which often accompany them, and which may by their severity endanger life. Thus aconite will moderate the inflammation of the throat in scarlet fever, and the catarrh and bronchitis in measles, and in this indirect manner lessen the height of the fever. It appears to be unable to shorten the course of these acute specific diseases. In the treatment both of simple inflammations and acute specific diseases, aconite may be appropriately administered in conjunction with some other remedy which may be indicated.

The treatment which has just been described will be found of value in erysipelas, in which disease belladonna may also with advantage be given. In the treatment of acute rheumatism aconite has been much praised, and from the eminence of the authorities by which it has been recommended there can be no doubt of its usefulness. Still in this complaint its good services are not so apparent as in acute inflammation. This disease has no regular course or duration, but may, untreated, last only a few days, or many months. It is difficult, therefore, to decide whether the speedy decline of the fever in some cases is a natural decline, or has been accomplished by the aconite. It is certainly ineffectual in many cases, which appear to run their course uncontrolled by this remedy. So that it is still required to determine in what class of cases it is useful, and in what cases it is without effect. In one respect it often appears to be of service—namely, in removing the pain from inflamed and swollen joints.

Gouty pains are said by some to yield to this remedy, and it has in many instances, apparently with good results, been given to persons suffering from neuralgia.

The effect of this remedy on the heart has been mentioned. There it was shown to lessen the rapidity of the circulation. Aconite may thus be used in all cases where there is vascular excitement which it is desired to suppress, and also when it is desirable to diminish the force of the circulation. In fact, it may be given in precisely those cases which were formerly treated by bleeding.

This remedy may be employed with advantage when the menses are suddenly checked, as by cold, on account of its power to restore the flux, and so remove the distressing and peculiar symptoms which not unfrequently occur when such a disease is produced.

The "fluttering at the heart" of nervous persons, and also nervous palpitations generally yield to this remedy. Usually when such disturbances occur, more general treatment is required, but when the conditions causing the palpitation cannot be discovered or cannot be removed, then aconite may be usefully employed.

The acute stage of gonorrhœa may be well treated by a drop of the tincture of aconite each hour, and the same treatment will often remove chordee.

ON SMALL-POX AND VACCINATION IN INDIA.

BY ROBERT PRINGLE, M.D.,

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THE importance of the subject of this paper, and the imperfect information which appears to have reached this country regarding it, as witnessed in India, and which I have noticed in the course of conversation during my short visit to England, have induced me to appear before the public, in the hope that I may be able, to a certain extent, to supply this deficiency, the cause of which, I am bound to say, lies at the door of my professional brethren in India, and is not chargeable to those in this country. On the contrary, had any sufficiently reliable information on the subject of either small-pox or vaccination in India been available to the authors of the latest standard works on vaccination, the few inaccuracies which may be detected in their pages on this subject, as met with in India, would never have appeared. The only claim which I shall attempt to advance for this paper is, that the description of the facts which I shall hereafter relate has been acquired by personal observation and inquiry in the places where they were witnessed; and that any conclusions which I may arrive at and record are the results of the experience gained during nearly thirteen years' continuous residence in India, which, with the exception of two years' military duty, have been passed among the agricultural classes of the community, while in medical charge of civil stations, and since 1864 as a superintendent of vaccination in the north-west provinces of India.

With these prefatory remarks, I will enter on the discussion of the subject, which, for facility of description, I have divided into two heads:—

1st. Small-pox as regards its prevalence, and the mortality resulting from it in India, and more particularly in the Bengal Presidency.

2nd. The various prophylactic measures adopted to check the disease when it has appeared, and to prevent its spreading.

1st. *Small-pox as regards its prevalence, and the mortality resulting from it in India, and more particularly in the Bengal Presidency.*—I regret I have no long columns of statistics to support any conclusion I may arrive at. The manners and customs of the natives of India, and the means at the disposal of the Government there, were, until within the last few years, fatal to any system of statistics, other than those connected with bodies of troops, and the diseases appearing among them. The remarks, therefore, which I am about to make, and which were gathered from personal inquiry and observation among the agricultural districts of Bengal and the north-west provinces of India, will not, I trust, be deprived of too much of their value by the absence of such an important support as is yielded by statistics, and thus militate unduly against the interests of vaccination in India. To those living in a country enjoying the benefits and blessings of vaccination it is very difficult to convey any accurate idea of the universal prevalence of small-pox in India, in districts where inoculation is not practised; for vaccination, as yet, cannot be said to have left any visible impression on the countless thousands of Hindoostan. The following, however, may be of assistance to those unacquainted with India, in aiding them to form some estimate of what a fatal scourge small-pox must be in the country alluded to.

In the Doab, in the districts lying between the Ganges and the Jumnah, and south of the Sewalick range, with a population of upwards of 9,000,000, I can state, from the experience of the past four years, that 95 per cent. of the population have been attacked with small-pox at some period of their lives, and that in 60 per cent. the traces of the disease are seen on the face, while in the remaining 35 per cent. the cicatrices will be found if the search is sufficiently carefully conducted. Nor need this be a matter of surprise. Anything more favourable for the propagation of small-pox, when it has once appeared, than the circumstances and conditions met with in a native village in India, it would be difficult to imagine; and should anyone in the village escape from the disease in one year, the next, or the next, and so on, will place the case in a condition from which ultimate escape is almost hopeless. As regards the 5 per cent. unaccounted for above, I would merely add, though they do not show traces of the disease, that is no proof that they have escaped entirely. The long period of incubation in small-pox, and the wandering habits of the natives of India in search of sacred shrines, will readily account for the facilities in the way of contagion and infection, and which end in making small-pox an annual visitant in an Indian village.

As regards the mortality from small-pox in India, I feel that in the absence of statistics I am treading on dangerous ground, and that what I shall now proceed to record might almost be beyond the reach of belief; but the incidents and facts which I shall state, and which, I may repeat, are the result of personal inquiry and observation in villages where small-pox was either raging at the time or had lately visited,

are but too well known to those who have studied the subject, and have witnessed an epidemic of small-pox in India. Instances are not wanting in other countries to show what a mortality accompanies small-pox where no prophylactic measures are employed to check its progress; and I would merely cite the case of the Island of Puynipet, as given in Sir James Simpson's pamphlet, entitled "Proposal to Stamp out Small-pox," and published in 1868. From a single case of small-pox left on this island, 3000 out of a population of 5000 fell victims to the disease. I may mention here that the mortality from small-pox witnessed in India, and to which I shall now allude, has reference only to those parts of Hindoostan where inoculation is not practised.

If we take into consideration the period of the year—viz., the hot and rainy seasons—when small-pox generally rages as an epidemic, the circumstances in which it finds its victims, the utter absence of any treatment other than smearing the body with clarified butter and turmeric, together with the observance of some religious ceremony, consisting mainly in processions and offerings to the deity, we shall be prepared for a high rate of mortality, but hardly for what seems really to be the case. Judging from my own experience, in villages which small-pox had lately visited, and from the observations of the villagers—who, I may add, were inclined to view vaccination unfavourably as a European or foreign innovation, and were therefore not likely, by increasing the mortality, to make out too strong a case for its introduction, as likely ultimately to interfere with their religious prejudices,—I should consider the mortality to be as high as 80 per cent. in very young children, in those a little older, 60 per cent.; but, as far as I could learn, seldom if ever under 40 per cent.; and, as this is only met with in the case of adults, it may be omitted from the calculation, for the following reason:—In the districts I allude to, it is rare to find an adult native suffering from primary small-pox, or one who has been proof against this continuous contagion till he has reached that age—a further proof of the prevalence of the disease. So fatal is small-pox among children, that the following has become quite "a saying" among the agricultural, and indeed the wealthier, classes—viz., never to count children as permanent members of the family, nor make arrangements to leave them money, &c., until they have been attacked with and recovered from small-pox.

2nd. *The various prophylactic measures adopted to check the disease when it has appeared, and prevent its spreading.*—This, which I consider the more important division of this paper, can be best discussed by subdividing it into two—viz.:

A. The prophylactic measures employed by the natives of India, which may be summed up in inoculation.

B. Those had recourse to by the Government of India, and which are comprehended in their schemes of vaccination.

A. *The prophylactic measures adopted by the natives of India.*—With the exception of the districts in which inoculation is practised—viz., the Himalayan range generally, and some portions of Lower Bengal, the natives of India adopt no measures whatever either to check the disease or to prevent it spreading; on the contrary, the numbers which collect at the religious ceremonies, conducted during these epidemics with the view of appeasing the offended deity of small-pox, must have the effect of conveying the contagion to villages which had as yet escaped it. The natives of Hindoostan consider an outbreak of small-pox to be due to the displeasure of the female deity who presides over this scourge. Hence the name for this disease, which, though it may, and does, vary with the dialects of the districts, is, nevertheless, that of the deity in that particular part of the country—for instance, "Thakooranee," or the goddess, &c. I mention this circumstance, as it will help to account for the apathy with which the natives of India view this disease, and may explain the reason of their adopting no treatment for it other than the benefits supposed to be derived from religious ceremonies, but submitting with a fatalism, always the more intense as it is a religious one, to its ravages. When I once hinted to a native, at a non-vaccinating period of the year, that he should not allow his child to play with others who were suffering from small-pox, his answer, which was most characteristic of the above, was, "Never mind, the child may as well take the disease now as a year or two hence; the sooner, perhaps, the better. If it recovers, which God only knows, I can calculate on its life."

I will now briefly allude to the practice of inoculation as met with in the Himalayas, where it has been adopted since the most remote times, and whence it probably extended to Bengal, having been received primarily from Central Asia through one of the Himalayan passes. The following description is from personal observation and inquiry in villages where it was being employed or had lately been practised; while that of which I was not an eye-witness was obtained from inoculators by profession, whom I had taught vaccination and brought on the Government establishment as vaccinators.

There is no separate profession of inoculators; the practice is in the hands of the priests, and seems to be hereditary, and is taken up by them as a means not only of adding to their income, but of enabling them to spend four or five months every year, not unpleasantly, and at the expense of the villages in which they operate. On the first appearance of a case of small-pox in the Himalayas, imported probably from the plains, the inoculators hurry to the spot, and, from ignorance, allowing the vesicular stage to pass, wait for the pustular, or generally for that of desiccation. During both these latter stages the inoculators collect as much pus and as many crusts as they can, the former on cotton or wool, and the latter as they fall off; though when in a hurry, by a small present, they can easily remove them prematurely. Supplied with this variola virus, they hasten to their districts, and commence operations in a village as follows. Having collected all the cases which have neither had small-pox nor been inoculated, they operate by scratching, with an instrument composed of a bundle of *seven* needles tied together, at the base of the thumb in the right arm in males, and the left in females; and having got a raw bleeding surface, they bind on some of the cotton or wool charged with variola pus with a *blue* thread; this they leave till an advanced stage of ulceration sets in, when it is removed. Should the supply of variola crusts be sufficient, they are powdered up with sugar and flour, and, with the addition of water, made into a ball, which is swallowed or eaten by each of the patients. To prevent the small-pox resulting from these operations spreading to the neighbouring villages, all the cases requiring inoculation are operated on in the same day if possible, as the period of quarantine, strictly enforced, is limited to a month after the last case inoculated. No means being used to prevent the contagion spreading, by disinfecting the clothes &c., this quarantine of a month generally proves of little ultimate benefit. All communication with this village is closed, producing a complete stagnation of the little trade they enjoy, and often preventing the villagers obtaining their annual supply of salt, rice, &c., at cheap rates from the plains and the interior, as no passing merchant will open barter with a village under the flag, so to speak, of inoculation. During this month the inoculator lives at the expense of the villagers; and, what with fees for the treatment of any serious case resulting from his operations, and the perquisites of feasts and religious ceremonies, his time is pleasantly and not unprofitably spent.

(To be concluded.)

SULPHUROUS ACID IN TYPHOID FEVER.

BY ROBERT HAMILTON, F.R.C.S.,
SURGEON TO THE SOUTHERN HOSPITAL, LIVERPOOL.

IN the late epidemic fever at Bootle, notices of which appeared at the time in the pages of THE LANCET, I employed in the last eight cases which came under my care sulphurous acid, and was so much impressed with the mild form the attack assumed, and the apparent cutting short of the progress of the disease, that I am induced now, when fever of the same description is prevailing in other parts of England, to ask those readers of THE LANCET who have much to do with it, to give the remedy a more extended trial, and thus confirm or otherwise the report here given.

The cases were all typical ones of typhoid fever occurring in the district infected, and, in some instances, in houses where previous cases had been. Five were children under ten years of age; three were grown-up young people. The

symptoms corresponded with the first division of symptoms described by Dr. Scott in THE LANCET of Dec. 19th, in his paper on the epidemic at North Shields, and I therefore do not recapitulate them. The sulphurous acid was given in one-drachm doses every four hours to children, and three-drachm doses to the adults, combined with orange syrup and water.

Of course, it was in reality but the internal administration of sulphur in a form that could more readily assimilate itself with the other contents of the stomach. It was commenced on the first day of my seeing the patient, which was generally the second day of the attack. It did not at once relieve, but the progress of the disease seemed stopped, and after the fifth day improvement began, and rapidly continued to convalescence.

If these results were due to the sulphur, then it only accords with the theory of the nature of the disease generally entertained: the germs of a fungus have entered the system. Its rapid growth and multiplication within would have poisoned the blood and the whole system, had it not been checked by the destructive action of the sulphur upon it, whereby it was rendered inert, and its further development checked. The disturbance of function and of nutrition already set up was recovered by the *vis medicatrix naturæ* as soon as the fever poison ceased to act.

Liverpool, Dec. 22nd, 1868.

SUCCESSFUL CASE OF OVARIOTOMY.

PEDICLE CLAMPED; ACCOUCHEMENT SEVENTEEN MONTHS AFTER OPERATION.

BY J. SWIFT WALKER, M.D.,

MEDICAL OFFICER OF HEALTH TO THE BOROUGH OF MANLEY.

M. S——, native of Tracey, Devonshire, aged thirty-six, married; had six children born alive, two premature births caused by fright. A fine tall woman, looking younger than her real age, one of three sisters, none of whom have suffered from any uterine disease. About two years ago began to suffer palpitation; menses scanty, and often deficient.

On Nov. 29th, 1866, was confined of a child, when she began to be very prostrate; never perfectly recovered, but always noticed that she was no smaller in size than before accouchement; in fact, she was larger a fortnight after than before. Never tapped.

On April 9th, 1867, she was first seen by me, and was evidently suffering from over-suckling; abdomen a tremendous size, distended by a distinct tumour, but more to the left than right side; rests better on left side; not painful to touch; not movable; fluctuation distinct on palpation; measures round the body opposite the umbilicus forty-eight inches—eight inches from umbilicus to ensiform cartilage, fourteen from the anterior superior spinous process to the umbilicus; no œdema of feet or legs; no bearing down or pain in the groin; great sense of weight; on vaginal examination the os is *in situ*, but a distinct tumour can be felt pressing on the side of the vagina; obliged to pass water very frequently; areola of breasts not darker than usual.

On May 1st, 1867, she was put under chloroform in a room of a temperature of 60°, and an incision made eight inches long. The cyst was punctured, and nineteen pints of clear fluid drawn off, when the cyst was found adherent to the abdominal parietes internally; also to the omentum, but easily stripped off; then turned out of peritoneal cavity. The pedicle was clamped, being very short, and the wound was closed by nine sutures.

On examination, the tumour consisted of a multilocular cyst, containing many smaller ones, and weighed two pounds and a half.

May 3rd.—Removed clamp.

8th.—Passed water herself, and bowels relieved.

12th.—Sat up.

October 20th, 1868.—She was confined of a fine male child; natural labour, and made an unusually rapid recovery.

A Mirror
OF THE PRACTICE OF
MEDICINE AND SURGERY
IN THE
HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

KING'S COLLEGE HOSPITAL.

CLEFT PALATE.—REMOVAL OF A LARGE SEBACEOUS CYST FROM THE NECK.

(Under the care of Sir WM. FERGUSSON.)

A LAD was placed upon the table in the operating theatre on Saturday last, whose cleft palate Sir William had operated upon a twelvemonth since. There remained only a cleft of the uvula, the edges of which were now pared and brought together by a stitch. Sir William called attention to the great irritability which the patient then displayed as contrasted with his firmness under the former and more severe operation, and remarked upon the excessive sensitiveness of the uvula, which it was very common to see. He had performed the present operation in deference to the wishes of the patient and his friends, who believed that his speech would be thereby improved. He did not himself believe that a cleft condition of the uvula interfered with articulation. There were a great number of persons with congenital deformity of this kind, and their articulation was not impeded by it. The lad had improved in his speech since the first operation, and Sir William thought that he would still further improve. Indeed, it was his experience that many patients acquired unusually perfect powers of articulation after operations for cleft palate, probably because they educated the faculty with more than ordinary care.

A grey-haired man was next presented, who had a tumour in the right side of his neck, just below the auricle, and behind the ascending ramus of the lower jaw. The tumour was readily movable, and covered with skin, which appeared very thin. Sir William made a crucial incision through the skin, reflected the flaps, and dissected out entire a tumour, which, when removed, was the size of a duck's egg. It consisted of a cyst or bag filled with sebaceous material, and the operator had adopted this by no means the readiest plan of removal, because he wished to preserve the cyst entire as a rare example, in regard of its size, of a sebaceous cyst. The tumour commenced so long ago as twenty-seven years. It was only within the last few years, he said, that it had grown rapidly, and there was nothing to be done for it that he could recommend except removal by the knife. No doubt the application of caustic would have taken it away, but at a great expenditure of time and suffering.

WESTMINSTER HOSPITAL.

CLEFT PALATE IN A CHILD AGED FIVE YEARS; OPERATION WITHOUT CHLOROFORM; SUCCESSFUL RESULT.

(Under the care of Mr. FRANCIS MASON.)

THIS patient was a boy aged five years, having a congenital fissure involving the whole of the soft palate, upon whom Mr. Mason operated in October last, without administering chloroform. The edges of the fissure having been pared, three silk sutures were introduced, which were removed on the third day. Union was complete throughout from the extremity of the uvula, with the exception of an almost imperceptible pin-hole near the hard palate.

Mr. Mason said that he had purposely commenced the operation by paring the edges of the fissure, because dividing the muscles was a painful process, and was sometimes attended with smart hæmorrhage, which would probably have alarmed so young a patient. The process of paring the edges was comparatively painless. He had taken great care to dissect each side off in one continuous piece, so that there might be no doubt as to the whole surface being raw. The little patient had behaved remarkably well up to this point; but, on an attempt being made to introduce the needles carrying the sutures, he closed his mouth resolutely, and it was necessary to use a screw-gag to keep it open. This was easily effected, and the operation completed without further difficulty. The parts came together so well that it was thought unnecessary to divide the muscles.

Mr. Mason believes that this patient is the youngest ever operated upon successfully without chloroform. He objects to chloroform on account of its frequently causing vomiting, which is a matter of some importance to be avoided after the operation of cleft palate. He thought that an attempt should be made to close the fissure as early in life as possible, so that the patient might have a better chance of losing by education the peculiar nasal twang always more or less associated with cleft palate.

CHARING-CROSS HOSPITAL.

THE USE OF CARBOLIC ACID.

MR. R. BARWELL tells us that he has gradually adopted carbolic acid for a larger and larger class of cases, including wounds (recent and old), burns, syphilitic sores (primary and secondary), certain skin diseases, and sundry other maladies. Of the forms wherein he has used the acid, it need only be said that the lotion (from ten to fifteen minims of carbolic acid glycerine to the ounce of water) is that which he finds most readily applicable; a sort of thick ointment or putty, made of the acid mixed with oil and whitening, he also occasionally uses. The multiform plasters described by Mr. Lister require much time in their application, and his slight experience of them does not encourage him to expend such time on them.

Recent wounds (surgical).—In two cases in which Mr. Barwell opened the palm widely, the lotion was applied to the whole wound, deep and superficial, which was also covered with the putty, spread thickly on lint. One case healed without suppuration; in the other that action was but slight. In one case of excision of the shoulder-joint, the external wound tended to heal even too rapidly, and the opening necessary for the escape of deep pus had to be kept artificially pervious.

Recent wounds (accidental).—Of these we may select two men severely wounded with glass during the burning of Her Majesty's Theatre. The wounds healed, not by first intention, but rapidly by a sort of dry, or nearly dry, granulation. The same means produced the rapid healing of a deep and very jagged wound received in the boiler explosion in Charles-street. This wound closed in twenty-four days.

Burns.—When the blistered cuticle separates, the lotion appears to produce more rapid healing, Mr. Barwell thinks, than any other application. There is less pain and less suppuration, therefore less exhaustion, than with other modes of dressing.

Syphilis.—Among a large number of patients with primary sores, those who had used carbolic acid lotion properly have been freer from buboes. The sores have healed, and induration disappeared more rapidly than with those who had not the lotion. He has strong reason to believe that the occurrence of secondary symptoms is less frequent, *cæteris paribus*, among those using the lotion; but the time has been insufficient for arriving at any absolute conclusion; and the proverbial uncertainty belonging to out-patient practice also precludes his speaking positively on this point.

Two cases of favus, and three of porrigo, were successfully treated by this lotion. A patient with scabies thus treated was rapidly getting better, when he disappeared from the *clinique*.

Provincial Hospital Reports.

LEEDS GENERAL INFIRMARY.

REMOVAL OF THE ENTIRE TONGUE.

(Under the care of Mr. NUNNELEY.)

IN addition to the five cases of removal of the entire tongue described in a paper published in the *British Medical Journal* for Nov. 5th, 1866, Mr. Nunneley has since that time had seven others, all of which have recovered. Mr. J. A. Nunneley, M.B., has given us this note respecting them.

The operation has been somewhat simplified, but is substantially the same as described in the paper referred to. The eye in the broad end of the blade, which carries the wire rope of the écraseur, is now made open, so as to allow the latter to be attached without tying, and to be readily removed when necessary.

In order to ensure the removal of the whole tongue, some plan was necessary to prevent the wire rope from slipping forwards after it was placed in the desired position, and before the screw of the écraseur was tightened; in the earlier operations, hare-lip pins were thrust through the tongue, as far back as necessary, and the loop of rope put over these, which were removed when the rope was so far tightened as to be fixed. This same purpose is now effected much more easily by an instrument slightly curved to accommodate itself to the tongue, and having two branches, at the end of each of which is a notch to receive and push backwards the rope, by which means the latter is kept in position, and may be fixed to any part of the tongue, even to its extreme base.

The following are the details of the operation as Mr. Nunneley now performs it:—A sharp-pointed blade, curved on the edge, about four inches long, and having in the broad end an open eye carrying the wire rope of the écraseur, is passed about midway between the jaw and the os hyoides, but rather nearer the former, and exactly in the median line, into the mouth, and is brought out at the frænum linguæ, and as near the tongue as possible, and the blade removed. The loop of the rope is passed over the tongue, which is drawn out of the mouth as far as possible by Lüer's tongue forceps, and is pushed as far back as necessary by the instrument mentioned above, and held until the screw of the écraseur has been tightened so as gently to fix the rope. Up to this point there has been but little pain, and the voluntary efforts of the patient have materially assisted. He may now be put fully under chloroform. The screw of the instrument is steadily and deliberately tightened, and the tongue gradually cut through.

Twice only has there been any hæmorrhage, and in both cases the tongue was unusually soft, and had been cut through too quickly. It was in each case arrested without difficulty by a ligature.

The whole operation is perfectly easy and simple, leaves no deformity afterwards—for the small wound under the jaw heals at once,—is attended by but very little pain, is usually almost bloodless, requires but few instruments, and occupies but a short time in its performance. Each of the last three cases has left the hospital about the tenth day.

TAUNTON AND SOMERSET HOSPITAL.

CASE OF AMPUTATION AT THE HIP-JOINT; RECOVERY.

(Under the care of Mr. HENRY J. ALFORD.)

THE following case is an addition to the list of recoveries after amputation at the hip-joint for disease, and it also bears testimony to the great value of Lister's aorta compressor in an operation of this kind. Hardly a drop of arterial blood was lost, and no ill effects arose in any way from the application of the instrument. Thus one of the great dangers which used formerly to be dreaded in this operation—namely, hæmorrhage—is entirely removed.

Thomas H——, aged forty-two, a labourer, was admitted on June 2nd, 1866. About two years ago he first perceived a swelling, about the size and shape of an egg, in the upper

part of the left popliteal space. It grew very slowly at first, and caused him no pain till a year after, when it was as big as a man's fist. He then felt pain by night, though not by day. He continued his work until September 24th, 1865. On admission, iodine was applied, and iodide of potassium given, without effect; and he left the hospital October 21st for a time, being again admitted on June 2nd, 1866. He was then found to have an enormous swelling of the left thigh, chiefly at the posterior part. Its upper limit was about four inches below the level of the trochanter major, and its lower five inches below the level of the lower margin of the patella. Anteriorly the boundaries of the tumour were by no means well defined, either above or below. The movement of the hip-joint was perfect, and there was some movement of the knee. The skin, particularly posteriorly, was red and brawny, and in some places it had given way, and small, circular, unhealthy-looking ulcers were found. The leg and foot were much enlarged from œdema, which diminished on the application of a bandage and keeping the limb raised. The patient looked pale, emaciated, and cachectic, and evidently suffered great pain.

On June 12th, after consultation, amputation at the hip-joint was performed. The precaution of bandaging and raising the limb prior to operating was taken, in order to drain as much blood as possible out of it. A little brandy was given, and before the chloroform. Lister's aorta tourniquet having been applied, a long anterior and short posterior flap were made, the joint being opened and the limb disarticulated as soon as the anterior flap was completed. The femoral artery was at once ligatured. Scarcely any arterial blood was lost. Seven ligatures were applied in all, which controlled all hæmorrhage. Twelve silver-wire sutures were then applied, and the stump covered with strips of wet lint. The man was ordered thirty minims of Battley's solution, and beef-tea and brandy.—8 P.M.: Slightly sick. Ordered ice, champagne, and Liebig's ext. carnis, and also a draught containing laudanum, sal volatile, and chloric ether.

June 13th.—Has passed a comfortable night; no hæmorrhage or oozing; takes his food and wine; tongue moist; passed water freely. To repeat draught at night.

14th.—Bandage and lint removed; stump looks well; has sherry instead of champagne, and chicken for his dinner.

17th.—Takes food, and sleeps well; in no pain; no bad symptoms. Some sutures were removed.

18th.—Removed the rest of the sutures, and applied strapping and wet lint. Stump looking very healthy.

July 8th.—All the stump healed, except at the upper and inner portion, where the ligature on the femoral still remains. This came away on the 14th.

15th.—The last ligature was removed. The patient puts on his clothes, and sits up every day.

23rd.—He goes into the garden daily; convalescent, but weak.

BUCKS GENERAL INFIRMARY, AYLESBURY.

INJURY TO THE HEAD; COMPRESSION OF BRAIN; GREAT DELAY IN SYMPTOMS; DEATH.

(Under the care of MR. HOOPER.)

THE interest of the following case lies in the lapse of time between the receipt of the blow and the setting-in of coma. The blow must have been received about midday, and the man retained consciousness till five in the evening, and was in the interval quite able, not only to complete his morning's work, and give a satisfactory report of the same to his employers, but even to converse quite rationally with his friends afterwards. The lateral sinus must have been lacerated at once, and extravasation commenced, but the blood having to force its way between the dura mater and the skull, thus meeting great resistance to its progress, the subsequent compression was considerably delayed.

A. B——, a brewer's drayman, aged thirty-five, was brought to the infirmary between seven and eight o'clock in the evening of the 5th of August last, quite unconscious, and his hair matted with blood. On examination a depression was found behind the left ear, and on a plane above it, situate over the posterior part of the parietal, and abutting on the occipital bone. This was obviously caused by ecchymosis round the site of the blow, and not, therefore, due to fracture. The head was shaved, a cold lotion applied, and a dose of calomel administered. But coma persisted, and at half-past seven the following morning, about twelve hours after admission, the man died.

A post-mortem examination showed a large thick clot on the right side, between the dura mater and the cranium (the blood had evidently proceeded from the lateral sinus), producing compression of the brain. No fracture was found at the part struck; an extensive fissure was discovered over part of the right parietal, petrous portion of temporal, and involving the greater wing of sphenoid bone, but no depression or displacement whatever. At the inquest which followed the death, the exact way the blow was received was not made out, as no one saw it done. The man had been out with his dray in the morning, and on subsequently arriving at the brewery, about one o'clock in the day, where he gave in his accounts with *perfect accuracy*, he was observed to have blood-stains on his clothes. He accounted for them by saying that a cask fell off his dray, and, on trying to replace it, the horse started, causing the cask to fall out with a jerk, and strike his head. He was able, however, to put back the cask, and go on with his work. Other witnesses had noticed the man asleep on his dray, his body leaning outwards, thus making a probability of his falling off, and so receiving the blow. After settling his accounts at the brewery, he went to his cottage, and entered into conversation with his friends, but afterwards, feeling faint, he went to lie down, and became comatose about five o'clock in the evening.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

ANNUAL MEETING.

ON Tuesday last the annual meeting of this Society was held, Mr. Simon, F.R.S., the then President, in the chair. The Council in their report dwelt, in the first place, upon the important labours of the Committee on Morbid Growths, which would tend to make the archives of the Society of very great scientific value. They, however, drew attention to one result of the establishment of the Committee as affecting the members generally. They thought that they could trace a tendency on the part of the members to neglect making a careful examination themselves of specimens, leaving this duty, in fact, entirely to the Committee. The number of members at present is 428. The new admissions since last October were less than usual, and the Council suggested that the members who were connected with the various schools should impress upon the attention of their colleagues who have not joined the Society the advantages which it was capable of affording. The total receipts during the year were £508 6s. 10½d.—the largest income on record. The sale of the "Transactions" brought in £43 13s.; subscriptions, entrance fees, &c., £418 19s. The last volume of the Transactions cost the Society £370 13s., but it was a very large one. The total expenditure was £509 14s. The report was adopted.

Dr. H. GREENHOW moved the alteration in Bye-laws 14 and 19, which we noticed last week. As regards the former, the Council proposed that instead of the non-resident members paying a composition fee of three guineas for the Transactions, they should be at liberty to buy them at cost price; the fact being that the Transactions have increased so much in size and value, that the composition fee of three guineas is now an inadequate sum.

After Dr. Greenhow had explained, in answer to a question from Dr. Seaton, that the altered law was not to be retrospective in its operation, the proposal was carried.

The alteration in Bye-law 19 was to this effect,—that all resident members may pay a composition fee of fifteen guineas in lieu of entrance and annual subscriptions, (the sum at present being ten guineas.)

Dr. PEACOCK and Dr. DOWN thought that a sliding scale should be adopted as regards the composition fee, according to the duration of membership, and that the Council should consider the question in relation to this point.

Dr. SCHULHOF asked whether the composition fees were invested, or used for current expenses.

Dr. QUAIN stated that all the composition fees had been invested, save a few recently; but £100, derived from annual subscriptions, had been invested as an equivalent.

Mr. ERICHSEN and Mr. CURLING spoke in favour of a sliding scale, and some discussion ensued as to the fairness of raising the composition fee in the case of old members, the speakers insisting that the demand for fifteen guineas as a composition fee should be made only from members elected in the future.

Dr. GREENHOW, however, pressed his motion.

Dr. LANGMORE proposed that the question be referred back to the Council. This was seconded by Dr. CHOLMELEY, and carried by 50 to 4.

Dr. GREENHOW then proposed that every member elected after January 1st, 1869, may pay a composition fee of fifteen guineas. This was carried.

It was understood that the matter of the sliding scale in the case of composition fees should be considered by the Council.

The ordinary business of the Society then commenced.

Dr. MURCHISON read reports by the Committee on Morbid Growths, on Mr. Heath's case of tumour of the tongue, on Dr. Kelly's case of cancer of the femur, which was declared to be fibro-plastic, and on Mr. Adams's case of syphilitic tumours of the leg.

Dr. PEACOCK exhibited a Malformed Heart, removed from a child aged thirteen, and presenting occlusion of the orifice of the pulmonary artery by adhesion of the valves. The aorta arose from both ventricles; the foramen ovale was closed. The question as to how blood got into the pulmonary artery was undetermined, for the simple reason that no special examination had been made touching this point by the gentleman who sent the heart to Dr. Peacock. The latter commented on the importance in cyanotic cases of determining, not only the condition of the heart, but the mode in which the circulation was carried on through the vessels in connexion with it.

Dr. PAYNE exhibited specimens of Multiple Vascular Tumours of the Liver, Ovary, and other organs. The tumours were composed of dilatations of venous channels containing coagulated blood. In the case of the liver the tumours were in connexion with the portal vein; those related to the kidney were injected through a branch of the renal artery. There were also tumours about the ovary. Dr. Payne did not find any similar case in which the tumours were so large or so numerous. The patient died of hæmorrhage from the intestine.

Dr. BASTIAN showed specimens of Embolism in Minute Arteries of the Pia Mater (which he thought might be connected with the production of delirium) taken from a patient who died as a consequence of an attack of erysipelatous inflammation of the head. In the small arteries and capillaries were a large number of white corpuscles aggregated into masses, the larger being about $\frac{1}{100}$ in. in diameter, and plugging up the calibre of the vessels. Some of the masses were becoming granular and fatty. Embolic masses existed in the liver and the kidney. Dr. Bastian had examined cases of pneumonia, rheumatic fever, and other fevers in which delirium occurred, and found similar masses.

Mr. BARWELL thought that the delirium and the massing together of the corpuscles were the result of the inflammation, and not the delirium the result of the formation of the aggregated masses.

Dr. MURCHISON did not think that Dr. Bastian had shown that these masses were formed during life.

Dr. BASTIAN said there was no trace of inflammation in the vessels; but that secondary changes around the masses were taking place as in the liver.

The result of the ballot was then announced. In the first place MM. Claude Bernard, Louis, Billroth, Virchow, Ludwig, Helmholtz, and Bruecke were elected honorary members. The list of officers elected for the ensuing year was published by us last week.

Dr. DOWN moved a vote of thanks to the retiring officers. And Dr. PEACOCK, in seconding the motion, spoke pointedly of the valuable labours of the medical secretary, Dr. Murchison, who had edited the last four volumes of the Society's "Transactions."

Mr. SIMON (the President), in replying, said that as the vote of thanks just proposed to all the officers of the Society had not been subdivided so as to allow each to take his share of the difficulty of returning thanks, he was therefore obliged to speak for all; yet he had to acknowledge himself indebted to those gentlemen to whom the Society had expressed themselves indebted. If, after having the honour and happiness of filling the presidential chair, he, so unaccustomed to such an office, had managed to escape any misadventure, he must owe it to the indulgence of the members and, only less than that, to the valuable co-operation and assistance of those to whom the vote of thanks was offered. Speaking on behalf of the Council, he could not but allude to one topic. Within the last few weeks the Council had had the misfortune to lose, by death, one of the youngest but not least respected of its members—Dr. Hillier. Pathology was not the chief field of Dr. Hillier's industry, but in more than one field of professional work he was a very efficient and distinguished labourer. Loyally and lovingly attached to his profession, more from the opportunity which it afforded of doing good than from the gains it permitted, he was evidently actuated by a high sense of honour and duty. His untimely death happened under circumstances peculiarly sad. It cut short a career which probably would have led him to eminent personal success, and certainly to a position of more and more public utility. All well-wishers of the profession must have learnt with sincere pain that a life recently so full of the best of promise had terminated before its noonday. What else he had to say would be congratulatory. The prospects of the Society were never brighter; its usefulness never greater. The volume just issued contained abundant matter of the greatest interest to science, and for some time past there had been an increasing interest in the meetings. It would be difficult to pitch upon a subject more pregnant with interest than the one brought forward during that evening in reference to the relation between embolism and delirium. The Society had been greatly benefited by the work of the Committee on Morbid Growths, and the members must have noticed how the Society was tending to advance from the position of mere exhibition to a Society in the largest sense of the word pathological. He could not help referring to the list of men elected as honorary members—a list which, whilst it did honour to the components, also reflected honour on the Society. Amongst the elected might be noticed, not only those whose transcendent researches had contributed largely to pathology (e.g. Virchow), but the representatives of the modern march of physiology in the relation which it bears to pathology. Lastly, he congratulated the Society on the result of the ballot for the officers for the next year—eminently satisfactory as regards the gentleman selected as President. He was known to all as one of the most successful, and to many as one of the kindest-hearted men in existence. But the younger men might not remember, so freshly as the older ones, how he, twenty years ago, contributed to pathology work which marks an era in the matter to which it relates. In conclusion, he thanked them warmly for the vote of thanks just passed, and for the great honour they had conferred upon him personally in maintaining him in that chair for two successive years.

Reviews and Notices of Books.

The Pathology and Treatment of Syphilis, Chancroid Ulcers, and their Complications. By JOHN K. BARTON, M.D. Dub., F.R.C.S.I., Surgeon to the Adelaide Hospital, Lecturer on Surgery at the Ledwich School of Medicine, &c. &c. pp. 316. Dublin: Fannin and Co. 1868.

Syphilis and Local Contagious Disorders. By BERKELEY HILL, M.B. Lond., F.R.C.S., Assistant-Surgeon to University College Hospital, Teacher of the Use of Surgical Apparatus in University College, Surgeon to Out-patients at the Lock Hospital. pp. 505. London: James Walton. 1868.

(CONCLUDING NOTICE.)

IT is in the eye, perhaps, of all organs, that we have the phenomena and effects of syphilitic action most clearly epitomised, as it were, for our observation,—into its structure and composition there enter so many and such different textures, from the more simple and coarse to those of the

utmost delicacy. The effects of syphilis on the eye might form an interesting subject for a small treatise. In the peculiar forms of corneitis, the earlier and later forms of iritis, the occasional effects of syphilitic diseases of the retina, the lesions of the nerves entering the orbit, and the affections of muscle and bone, we may trace and study the pattern of all the pathological changes induced by syphilis. Surgeons and physicians have often appealed to the iris as illustrating the effects of mercury: how easily and beautifully can be traced the gradual and progressive clearing away of lymph, and the restoration of the iris and pupil to their normal appearance. It is an interesting fact, noticed by Mr. Berkeley Hill, and one which we have ourselves more than once witnessed, that while lymph was being dissipated by absorption from one eye under the use of mercury, an iritis has manifested itself in the other; which clearly indicates that the influence of the mineral is exerted over the products, and not over the other phenomena, of inflammation.

Having briefly sketched the progressive changes which have taken place in opinions regarding the pathology of syphilis, we must, still more briefly, we fear, consider the remaining points. While Dr. Barton proceeds to treat his subject according to the different stages observed in the natural evolution of the phenomena, and makes the third stage of syphilis to consist of a period of deposit, with the later symptoms and the degenerations which this deposit may undergo in itself and induce in the surrounding tissues in which it is embedded, Mr. Berkeley Hill pursues a somewhat different course. After giving an outline of syphilis, its causes, mode of propagation, symptoms, and progress, he considers the manifestations in groups, according to an anatomical arrangement,—the skin, alimentary canal, air-passages, bones, vessels, &c., brain and nervous system, and so on.

Up to what may be termed the end of the secondary stage, the evolution of the morbid manifestations is curiously regular; but beyond it, in what is called the tertiary form, there is much more irregularity, and several broad points of distinction exist between it and the previous stages. Whether the tertiary phenomena ought rather to be regarded in the light of sequelæ or not has not yet been exactly determined. Probably no syphilitic patient escapes the secondary manifestations, however much these may differ in extent and severity in different cases; but many certainly do not pass beyond them. Not only does it happen that syphilis does not commonly repeat itself in the same body, but the so-called relapses of the secondary symptoms are not in reality true relapses. The pattern and type of the manifestations alter somewhat in their character in the progressive evolution of the syphilitic action. The general manifestations commonly begin about five or six weeks after induration of the chancre and glands, in the form of an exanthem of very superficial character on the trunk of the body. This is preceded by some glandular enlargement, and a certain amount of chloro-anæmia; and the exanthem is often ushered in by slight fever, as we have ourselves ascertained by the use of the thermometer.

According to our experience, there are two distinct forms of syphilitic rupia, one of which occurs comparatively early, while the other is among the latest manifestations, two or three years after infection; the first is attended by a superficial form of ulceration, and the latter by a deeper and more extensive degree of ulceration and larger cicatrices. Zeissl says rupia never appears in inherited syphilis.

There is scarcely any internal organ of the body which may not be affected by syphilis. The late Dr. Todd clearly recognised its influence in causing many nervous diseases, and the clinical experience of subsequent observers has corroborated as well as extended his views. We must touch upon syphilitic disease of the kidneys and lungs. The former gives rise to what has, not inappropriately, been termed "syphilitic albuminuria;" the latter, to a form of chronic pneumonia, or some localised morbid process which in its symptoms may simulate consumption (syphilitic phthisis). The kidneys are less frequently affected than the liver. The two forms most commonly met with are the diffuse or interstitial, and the circumscribed; and lardaceous degeneration likewise often has a syphilitic taint for its exponent. In the lungs, we may have a fibrous inflammation or gummatous tumours developed, and the diagnosis will mainly turn upon our ascertaining a syphilitic history. The pathology and morbid anatomy of these cases has been minutely studied by Virchow, Wilks, Pleischl, Klob, and Lancereaux. Mr. Paget, who has, in the course of his professional life, tapped so many springs by his sagacious and extensive observation, has added something to our information on syphilitic disease of the intestine. For our knowledge of inherited syphilis we are, as is well known, mainly indebted to Mr. Hutchinson, who has worked at this, and indeed the whole subject, with his characteristic zeal.

With regard to treatment we do not find that recent authors have added anything to our information. Syphilisation has not stood its ground, and the theory of its action is disputed. In common with most men of impartial mind and common sense, the authors under review recognise in mercury the most reliable therapeutical agent we possess. But it must be borne in mind that neither in mercury nor in any other drug have we really an absolutely curative agent. By no amount of mercury or iodine can we exorcise the virus; we can only remove its manifestations. In the degenerative stages, the suppurative forms, and the ulcerations with involvement of bone, the effect of iodide of potassium in large doses, and the most careful attention to all matters of hygiene, demand a fair trial before we have recourse to mercury.

But we must stop. We have gone over a large number of subjects, necessarily in a discursive and superficial way, only touching most of them, but endeavouring to penetrate beneath the surface of some. In apportioning to the authors of these works the credit which is their due, we have said that they do not enlarge our knowledge by any new observations or original expositions. Mr. Berkeley Hill is evidently very familiar with the results of modern continental observation and speculation, and he uses these results with care and judgment. He has expounded his subjects by the light of the latest discoveries and of modern thought, and these may fairly be said to have increased our knowledge of syphilis, and imparted to it that unity and harmony which it previously lacked. As honorary secretary of the Association for extending the Contagious Diseases Act, Mr. Berkeley Hill had the opportunity of gaining much information of a statistical and sanitary character, which he has likewise utilised in his book.

A System of Physical Education. By ARCHIBALD MACLAREN. pp. 516. Oxford, 1869.

FEW men have done more for physical education than the writer of this book. By his gymnasium at Oxford he has promoted in an extraordinary degree the health and vigour of the young men of the better classes, while by his excellent athletic code for the army, and by his influence with successive War Ministers, he has aided largely in introducing that admirable athletic training which is transforming the stiff, slow-moving grenadier of old times into the vigorous, rapid, and enduring soldier of modern days. But these services, great as they are, are the least of his merits; he has written on his subject largely, and has written so well and so sensibly, without exaggeration and

without clap-trap, that he has succeeded in gradually bringing the whole nation to consider the important subject of physical training. Himself a physiologist, and conversant with the scientific part of his subject, he has been more able to set forth principles, and to convince by reason, than his predecessors, and his influence has been so much the wider, and will be so much the more enduring.

The work before us is one which should be in the hands of every schoolmaster and schoolmistress. It is marked in every line by good sense, and is so clearly written that no one can mistake its rules. We would recommend especially to the consideration of every parent the chapter on growth and development; it will be seen what powerful reasons there are for training every part of the muscular system as carefully and as systematically as the mind should be trained. In the injunctions against partial and incomplete work, either of body or of mind, we recognise the true philosophy of this subject, and the sooner that philosophy becomes an integral part of the national creed the better.

The work consists of two parts: the first is the chapter on growth and development to which we have referred, and the second is the explanation of the principles and practice of the various exercises. All the different plans are passed in review, and are illustrated by woodcuts. A great number of the exercises, and much of the apparatus, have been invented by Mr. MacLaren himself, for the purposes of bringing into use sets of muscles untouched by other exercises.

In reading this book one thought has pressed upon us continually: how earnestly it is to be wished that the physical training of women should be more attended to. We are too apt, women themselves are too apt, to think that men who are called upon for muscular strength, alone need muscular development. But what a mistake this is. As the mother is, so probably will the child be; and a race of puny, narrow-chested and feeble women must bring forth a race of men degenerating and dwarfing in each successive generation. The customs of our time do not permit, to the women of the middle classes especially, great bodily exertion; they do not work in the fields, like the rural peasant, nor have they the domestic work which often makes our female servants so much more finely shaped than their mistresses. No one can look at many of the young women of the better classes without feeling most strongly what a blessing it would be for them, and for the children whom they are to bear, if they could be obliged to follow some occupation which might develop their muscles, expand their lungs, and double their energy and vital force. Our modern system is a great failure in some points; in none more so than in considering that healthy manual labour can be neglected for generations without injury. It is not so, and it never will be so; the race that will not work, not with the head only, but with the body, must decline, and will give way to races of more vigorous physique. These are no imaginary fears; they are certain consequences: disuse leads to decay, and so wonderfully does every part of the body cohere, that disease of one part affects all. Let no one think that the mind remains untouched when the rest of the man dwindles. A few generations sees the mind also enfeebled, and, by a species of natural selection, the worn-out race disappears, and nature revenges herself by the substitution of a healthier stock.

Mr. MacLaren's book is not addressed to men only; there is not a mother who ought not to be imbued with its principles, and to seek for her daughters physical training as complete in its way as that she desires for her sons. We earnestly hope that the book will find, not only many readers, but earnest disciples. It will be for the benefit of the State, as well as of the individuals, if such be the case.

Analytical Records.

LIEBIG'S EXTRACT OF MEAT, MANUFACTURED BY THE AUSTRALIAN MEAT COMPANY. (HAMORNIE.)

THIS extract is made from oxen on the Clarence river, New South Wales, by the Australian Meat Company. It agrees very closely in flavour and strength with the extract of Liebig's Company, an analysis which we append furnishing results which closely approximate to those of the extract of the latter company:—

Per-centage Composition.

Water	17·83 grs.
Organic alcoholic extractive matter, containing creatine, creatinine, inosic acid, &c.	47·93 grs.
Organic extractive matter, insoluble in alcohol, containing 9·63 grs. of gelatine and 0·62 gr. of albumen	12·92 grs.
Mineral matter	21·32 grs.*
	100·00 grs.

Containing 7·01 grs. of nitrogen, equal to 44·86 grs. of albuminous matter.

* Containing 0·56 gr. of sulphuric acid, 1·82 grs. of chlorine, and 7·28 grs. of phosphoric acid.

LIEBIG'S EXTRACT OF MEAT, MANUFACTURED BY R. TOOTH, SYDNEY, AUSTRALIA.

Liebig's extract of meat has taken such a hold on the public, and is now so largely in demand, that there are now several manufacturers of it. One of the best known of these is Mr. Tooth, of Australia. We have made a full analysis of a sample of Tooth's extract obtained from the consignee's, Messrs. Coleman and Co., and we annex the results, together with a corresponding analysis of a sample from Liebig's Extract of Meat Company.

From Messrs. Coleman and Co.:—

Per-centage Composition.

Water	17·06 grs.
Organic alcoholic extractive matter, containing creatine, creatinine, inosic acid, &c.... ...	51·28 grs.
Organic extractive matter, insoluble in alcohol, containing 7·87 grs. of gelatine and 0·19 gr. of albumen	10·57 grs.
Mineral matter	21·09 grs.*
	100·00 grs.

Containing 7·03 grs. of nitrogen, equal to 44·99 grs. of albuminous matter.

* Containing 0·82 gr. of sulphuric acid, 2·19 grs. of chlorine, and 6·22 grs. of phosphoric acid.

From the Liebig's Extract of Meat Company:—

Per-centage Composition.

Water	18·56 grs.
Organic alcoholic extractive matter, containing creatine, creatinine, inosic acid, &c.... ...	45·48 grs.
Organic extractive matter, insoluble in alcohol, containing 8·56 grs. of gelatine and 0·29 gr. of albumen	13·93 grs.
Mineral matter	22·03 grs.*
	100·00 grs.

Containing 7·19 grs. of nitrogen, equal to 46·02 grs. of albuminous matter.

* Containing 0·49 gr. of sulphuric acid, 1·84 grs. of chlorine, and 8·22 grs. of phosphoric acid.

It will be observed that the figures correspond so closely that there is little or no essential difference between the extracts, while in strength and aroma Tooth's preparation is certainly in no degree inferior to the other.

THE Guardians of the King's Norton Union are about to erect a new workhouse, and have made choice of a plan for a building on the most approved principles, estimated to cost £11,600.

THE LANCET.

LONDON: SATURDAY, JANUARY 9, 1869.

WE are not sanguine enough to expect to do away altogether with unqualified practice. With much of this—as, for example, that of chemists—we can only bear. They are not all so ambitious as the Manchester druggist upon whose grievances we commented last week; who acted as the assistant of a surgeon to ironworks; who treated more serious cases than flesh wounds; and whose professional mind was evidently dissatisfied at being paid for evidence in a court of law as an ordinary witness, and not as an expert. Short of this ambitiousness, however, the medical practice done by the lower order of Manchester druggists is highly unsatisfactory, and seems a thing that should be taken into deep consideration by the registrars of the neighbourhood of Manchester and Salford, who have a great deal to do in the way of registering deaths. According to our information, these druggists prescribe extensively. Amongst the poor and middle classes of Manchester they are styled "doctors;" their usual charge is fourpence for each attendance; in "serious" cases some of them visit the unfortunate patients at their homes. This is a great evil in large towns, and one which cannot be dissociated from the high mortality of such towns. But it is an evil for which medical men are not responsible; they cannot control it; and there is this to be said for it, that it serves, by the force of contrast, to benefit legitimate and scientific practice.

We design more particularly at present to comment upon a form of unqualified practice for which medical men are responsible, and which threatens to assume proportions that will defeat the ends of the Medical Act, and injure the legally qualified practitioners of the country. We refer to the employment of unqualified assistants by medical men. Let us say at the very outset that we do not mean to be hard upon a class which has come into existence almost from the nature of things, and which, in lonely and rural parts of the country, includes many men who are really very useful. Thus much is often said to us by practitioners in letters, and the fact is one which partly caused our recommendation last week, that all medical students should, as a part of their education, for a certain time take a share in the duties of a common practice. There is a second admission to be made, that unqualified assistants have been useful in another sense. They have naturally been *cheaper* than qualified men. Medical practitioners to clubs and in country places are so often imperfectly remunerated that they are obliged to employ unqualified assistants because they can be had for less money than qualified ones. This, however, in itself, is an evil against which we ought to contend, in order to elevate the practitioner, rather than to lower the assistant.

Having made these various admissions in favour of unqualified assistants, we proceed, with the less hesitation, to point out the impropriety of introducing them unduly into medical practice. In doing so we are discussing no fanciful state of things, but a real one that is fraught with most objectionable results. In the colliery districts of Durham, and also at Birmingham, we are informed that it is common for a practitioner, responsible for the medical management of several collieries, to place at various distances from the principal's house unqualified assistants, who, with his plate on their door, practise with all the authority and impunity of registered men. This is a virtual contravention of the Medical Act; and in some recent cases has been punished as such by a fine. It will be in the memory of our readers that one THOMAS HOLLAND was lately fined £20 and costs for practising illegally as a surgeon, though MR. W. C. DEMPSEY—who has distinguished himself at Oldbury by agreeing to attend sick clubs for a less sum than by the profession at large was thought reasonable—tried to shelter him by saying that he was his assistant. In the same neighbourhood another practitioner tried to protect another person in the same way; but not effectually, and the unqualified assistant was fined £5 and costs. It is of the excess to which the use of unqualified assistants is carried that we complain. The last practitioner to whom we have referred was found on inquiry to have no less than seven unqualified men under the shelter of his name. Surely it was never intended by the licensing bodies that one diploma was to license eight men to practise—the holder of it and seven others.

Besides being in distinct opposition to the Medical Act, this employment of unqualified practitioners is open to two other grave objections. First, it is most unjust to qualified men. The seven unqualified assistants must have done the work of several qualified practitioners. It is unreasonable to think that regular medical practice is to be spoiled by the importation of numerous unqualified assistants under the protection of a qualified principal. We impress upon principals the injustice of such a use of unqualified assistants. But it is not only the regular practitioners, who have been obliged to pass through a long and costly ordeal to acquire the right of practice, that are injured by this extensive use of unqualified men, but it is clearly bad for the public and detrimental to that elevation of the medical art in which the public have so direct an interest. We have admitted the readiness of unqualified assistants; but they are nevertheless uneducated, and cannot be expected to practise medicine in a scientific spirit.

For these various reasons we conclude that while unqualified assistants cannot be altogether dispensed with, yet that it is most objectionable to place them in independent positions in which they virtually replace fully educated medical men. So long as they live under the same roof with a qualified man, and under his strict supervision, we cannot see much cause of complaint; but when this is exceeded—when the unqualified man is placed in charge of what is virtually a branch practice, then, in our opinion, the law is virtually evaded or broken, and properly qualified men are injured, and have a ground of complaint against the practitioner for abetting unqualified practice.

EITHER the elucidation or the delucidation of the cause of the North Shields epidemic has advanced a step. The history of the action of the authorities in regard to this outbreak is a fine illustration of the unsatisfactory nature of the sanitary machinery of the country, into which we are to have an inquiry at the hands of a Royal Commission. Somewhere about the beginning of November the epidemic was at its height. There were, it was estimated, 800 or 1000 cases in the town. The general facts of the epidemic were stated in our columns. The prevailing character of the cases was that of typhoid—many of them mild, and with a relapsing tendency. The cases were singularly distributed in the upper and better part of the town, in the line of the water-supply of a particular reservoir; and the distribution exactly corresponded to the line of an outbreak of cholera two years before. Such were the facts. Now for the action of the authorities. Suspicion—in some enlightened directions amounting to indignation—attached most strongly to the water-supply, and Mr. HAWKSLEY'S opinion was sought about the beginning of November. On the 28th of that month a letter was received from Dr. GEORGE BUCHANAN, requesting information for the Lords of her Majesty's Privy Council as to the outbreak, which was answered by "reports of the Borough Surveyor and Inspector of Nuisances, extracts from minutes containing statements of the medical gentlemen, the negotiations with the Water Company, the resolution of the Water Committee, with a return of interments and other valuable information." If Dr. GEORGE BUCHANAN found all this information insufficient or too vague, it is to be hoped that he has been duly supplied with the latest explanation of the outbreak supplied to the Water Committee of the North Shields Town Council on the joint authority of Mr. HAWKSLEY and Dr. LETHEBY. We should state that Mr. HAWKSLEY'S report was long in arriving, and indeed was only procured in time for the meeting of the Committee on Dec. 23rd, under an urgent representation from the Town Clerk that much uneasiness existed in the minds of the Committee and of the public, and that the visit of a Royal Commission was imminent. It is only just to the Water Committee to say that they seem to have been in earnest in desiring to have the water of the borough, or rather of a circumscribed part of the borough, carefully examined; for with this view they put themselves in communication with Mr. POLE, Secretary to the Royal Commission on Water-supply. At length, as we have said, Mr. HAWKSLEY'S letter was received, containing an account of Dr. LETHEBY'S examination of several specimens of the water and theory of the fever. We print it as it appears in the local paper, with occasional suggestions of the probable words used by Mr. HAWKSLEY; though we cannot pretend to make it perfectly intelligible at all points:—

"I have Dr. Letheby's report on the quality of the water, and am prepared to report except in regard to the distribution of the water. I have also conferred with Dr. Letheby personally. I may add that Dr. Letheby condemns the water as to its general unsuitability for a domestic supply; but is unable to detect any cause in the water itself to which the fever prevailing at Tynemouth can be attributed. It appears, too, that fever of the same kind has been not only prevalent, but epidemic in many other places, and is thought to be owing chiefly to a continuance of a high temperature in combination with a moisture of the atmosphere, thus repressing the natural exhalation from the skin, and inducing an impure condition of the blood. In the particular case in hand, the atmospheric influences have been assisted by [sewer?] gases making their way to the higher parts of the town, or by other causes of local origin, though this I cannot discover, the presence of the time of an impure supply of water from the colliery source. On this doubtful point, I may remark that I am certain of the existence of a small quantity of sulphuretted hydrogen in the water being raised from the colliery at the moment of my visit, although in the sample sent to Dr. Letheby no sulphuretted hydrogen could be detected. .....

"Dr. Letheby's report on four samples of water, received from the borough surveyor on the 10th ult., was then read. It stated that none of the samples contained anything which was positively injurious, although No. 1 might be at any moment charged with drainage matters in the unoxidised state, and none of them were fit for domestic use.

"Mr. Alderman Green said it would be seen from the reports that had been read that the committee were doing everything in their power in reference to the water question. It must be admitted, however, that instead of gaining more light on the subject, they were getting into more darkness. He could not understand what Dr. Letheby meant by saying that the water contained nothing positively injurious, and still unfit for domestic use. He thought Dr. Letheby should be written to, and asked to explain what he meant by so expressing himself."

We can only say that we share Alderman GREEN'S embarrassment in trying to understand how water can be at once unfit for use and yet contain nothing injurious. Despite the assurance of Dr. LETHEBY that none of the four specimens contained anything positively injurious, the inhabitants of North Shields must scarcely feel comfortable in receiving the mysterious notice that No. 1 *might at any time be charged with drainage matters in an unoxidised state*; and the Water Company of North Shields will scarcely feel flattered by the report that none of the four specimens of water are fit for use.

Dr. LETHEBY'S theory of the production of typhoid fever on a huge scale in the line of a certain set of water-pipes is certainly a very remarkable one, and would surprise us still more if we did not know that Dr. LETHEBY'S views on kindred points are notoriously peculiar. He says that one of the specimens of water he examined *might* become charged with drainage matter at any time. How does he know that it did not previous to this outbreak, and so as to be the cause of it? This would be a sufficient cause. The water was known to be defective in quantity. He himself declares it unfit for use, and such as might at any moment be charged with drain poisons. Mr. HAWKSLEY is sure that a specimen he saw on the occasion of his visit was charged with sulphuretted hydrogen. Why Dr. LETHEBY should prefer to such simple and sufficient explanations of typhoid, another, as full of fancies as it can be, is best known to himself. But let us have Dr. LETHEBY'S theory (of course we attribute to him the medical parts of the letter). It is this: that a high temperature and a moist atmosphere in combination produced the outbreak in North Shields, as in various other places. He is still more instructive, for he informs us of the exact way in which these atmospheric influences operate in producing fever:

"They repress the natural exhalations from the skin, and induce an impure condition of the blood." Really this is worthy of an itinerant doctor in a market-place on a Saturday night. All we can say is that we know of no such causes of typhoid fever; and if they exist, the sooner Mr. SIMON knows of them the better. High temperature followed by moisture might induce rheumatism or catarrhs, but not typhoid fever, unless all recent investigation is a delusion. Dr. LETHEBY himself brings the sewer poisons into the tail of his explanations, and at another portion of his letter lets us know that his opinion of the water was that occasionally it might be charged with sewage matter. After these admissions, it is a mere blinding of the eyes of the uninitiated to talk of repressed exhalations and impure blood. We take Dr. LETHEBY'S admissions and Mr. HAWKSLEY'S statements to be proofs of what we have always believed, that the water-supply in this case was the principal channel by which the cause of the fever was conveyed. We would not exclude the possibility of sewer gases having also a part in the production of the effects; but this theory will not explain the peculiar localisation of the epidemic. If the North Shields people are wise, they will either change their water company, or see that the company changes its water-supply.

Though we take the results of the examination of the water to be all in the direction of showing it to be faulty, and faulty in the very way that produces typhoid, it must be remembered that we do not owe to chemistry our knowledge on this subject or the kindred one of cholera. We know that these are often propagated through water, not by chemists having detected the exact causes of disease in the water, but because common, but close, observation has discovered a connexion between the drinking of certain water and the getting of certain diseases.

AN interesting discussion has been taking place during the last few weeks in the French Imperial Academy of Medicine, in reference to the etiology and treatment of puerperal peritonitis, the leading points of which we shall here briefly note. The argument commenced upon a case reported by M. GUÉRIN, in which, led by certain theoretical as well as practical considerations, he was induced to apply a peculiar mode of treatment; and both his theory and his practice have received sharp criticism from some of the older members of the profession. According to M. GUÉRIN, after labour the uterus usually recedes or retracts into the upper part of the pelvis; its orifice closes; and, as a consequence, the wound formed by the detachment of the placenta is placed in the condition of a subcutaneous wound, and undergoes immediate cicatrisation. Under certain circumstances, however, the uterus does not recede; its orifice remains more or less patent; and then, the air having access to the wound, it follows the same course as usually occurs with exposed injuries, the surface inflaming and suppurating, whilst the constitutional effects are rendered unusually noxious, owing to the internal, confined, and irregular surface of the organ.

So far, perhaps, most practitioners would be disposed to agree with M. GUÉRIN; but he now explains the supervention of peritonitis on a new and curious theory. He believes that the sanious and purulent fluids, rapidly undergoing putrefaction, are sucked up by the Fallopian tubes, through the operation of an aspirant force exerted by the abdominal parietes acting at each movement of inspiration on the contents of the uterine cavity. He states that he has unmistakably established the presence of such fluids in the tubes, and he then proceeds to say how easily the lesions occasioned by their presence may propagate themselves by continuity of surface.

Acting on this theory, M. GUÉRIN conceived the idea of applying an instrument which should induce a retrograde or downward movement of the uterine fluids. This consists essentially of a canula of vulcanised india-rubber, which is introduced into the vagina, the passage of which is completely closed by the action of certain ampullæ that can be inflated with air; and with the canula a suction apparatus is connected. M. GUÉRIN had only one case to report upon, but the effects produced were so immediate and beneficial that he thought it worthy of being brought under the notice of the Academy. In this case sharp inflammation succeeded labour, with stoppage of the lochia and great abdominal distension. The application of the instrument was followed by the removal of much purulent and sanious fluids, shreds of lymph &c., and large quantities of air, and all symptoms of peritonitis quickly subsided.

In commenting upon this case, M. DEPAUL expressed some doubts as to whether it was a case of peritonitis at all, and not rather one of metritis; and regarded the suction action of the uterus, as well as the passage of fluids from the uterus to the peritoneal cavity, as anatomically and physiologically impossible, since no fluids could be made to pass in this direction even with the aid of a strong syringe. He further demanded why, after craniotomy, or other operation involving the death of the child, had been performed, and in consequence of putrefaction the uterus had become tensely filled with gas, this did not escape into the peritoneal cavity, though, as is known, rupture of the uterus might even occur from this cause. M. BLOT urged that if the uterus were so flaccid after delivery as not to reascend in the pelvis, it must be obvious that it could exert no aspirant power. M. POISEUILLE, again, whose researches on the physics of the circulation are so well known, expressed himself decisively against the possibility of any suction power being exerted in the mode and direction indicated by M. GUÉRIN.

It appears to us that the act of inspiration, so far from leading to an ascent of the fluids contained in the uterus and Fallopian tubes, would have an opposite effect, since it is produced by the descent of the diaphragm, which must occasion increased pressure on the abdominal organs, as is indicated by the protrusion of the abdominal walls. Again, some influence must surely be attributed to the ciliated epithelium lining the Fallopian tubes, the action of which is well known to be downwards. The reasoning of M. GUÉRIN, therefore, in respect to the mode of origin of this disease, though ingenious, is not quite satisfactory; and whilst the treatment he has suggested deserves further trial, its success can scarcely be explained on the theory he has proposed.

ANXIOUS to avoid, during the late "festive season," everything of an indigestible character, we had dropped the subject of the recent decision of the Council of the College of Surgeons as regards Examiners in Physiology set forth in THE LANCET of Dec. 19th. As we are now, however, making fair progress in the new year, with July looming in the future, we venture to recur to the subject.

On the occasion to which we have alluded, the Court of Examiners, aided by two life members and (*proh pudor!*) by two recently elected members of Council, outvoted the motion for appointing two Examiners in Physiological Science, the Examiners of course maintaining their own competency to examine in this or any other part of medical knowledge, and their abettors aiding them, either from old association or from a lively sense of benefits to come. As it was, there were, without the President, eleven votes against and nine for the proposition; and had the entire Council been present the result would have been the same, since of the three absent members two would in all probability have voted against and one in favour of the motion. It is evident, then, that so long as there are eight of the Court of Examiners in the Council who can always count upon the support of the two life members, and upon catching the votes of a waverer or two from the other side, no proposition of reform can possibly be carried; and it only remains for the Fellows, as we have already urged, to eliminate Examiners by their votes in July.

We understand that the Examiners defend their conduct on the plea that students could not stand a severe examination in Physiology. Possibly so. But for the ordinary diploma a severe examination is not demanded; and a student is much more likely, we take it, to come to grief with an Examiner who possesses only a smattering of the subject he is examining upon, than with one who, thoroughly conversant with it, can tell by the way the questions are answered whether the student has really learnt his subject, and can moreover make allowances for the different views of different authorities which would appear quite antagonistic to one less versed in the subject. It is absurd to say that pupils are not taught Physiology, when a member of the Council itself told that august body some months back that Physiology was obliged to be "ground down" to the College standard, that commonly taught being much too advanced to be at all safe at its tribunal. Then again it is said that it would be difficult to find proper Examiners! Let the experiment be made, and we will venture to promise no lack of Examiners. There are eleven metropolitan schools, each with one or more teachers of Physiology, to say nothing of those who devote themselves to the subject from sheer love of it. It might be possible to find two gentlemen out of all these who could be safely entrusted with the work; for it must be remembered that there is no law compelling them to be Fellows or even Members of the College. The Universities care nothing whether their Examiners in Anatomy or Physiology are physicians or surgeons; why should the College affect a "purity" which the practice of some of its magnates by no means upholds?

WE are informed that Dr. Brown-Séquard has declined the Chair of Comparative Pathology at the Paris School of Medicine.

Medical Annotations.

"Ne quid nimis."

THE PATHOLOGICAL SOCIETY.

SOME financial matters of importance were brought before the notice of the members of this Society, at their annual meeting on Tuesday last, and gave rise to a good deal of discussion. The increasing value and expense of the Transactions induced the Council to recommend that the 14th bye-law, by which non-resident members pay a composition fee of three guineas for the Transactions, should be rescinded, and this was accordingly done; the law being altered so as to permit non-resident members to purchase the Transactions at cost price. It was then proposed to raise the composition fee of ordinary members from ten to fifteen guineas. This was objected to, of course, on the ground that it would be unfair to make this increase retrospective, and after this feeling had been expressed, it was quite clear that the proposition of the Council would not be carried. Several Fellows suggested that the matter should be referred back to the Council, who should consider the advisability of introducing a sliding scale, by which, for instance, members who had been ten years in the Society might compound for five guineas, &c. The result of the discussion was to leave the old bye-law to apply to the members already elected, an additional law being passed, by which members elected after the 1st of January, 1869, might compound for a fee of fifteen guineas. Thus vested rights, so to speak, are protected. We consider that it would have been manifestly unfair to make the new bye-law retrospective. It is understood that the question of a sliding scale as regards composition fees is to be considered by the Council, and we have no hesitation in recommending its adoption in the Pathological, as in other societies it has been found to work satisfactorily. Dr. Quain announced that about £500 of the moneys which he had received as treasurer had been invested. In replying to a vote of thanks which was given to the retiring officers, Mr. Simon referred in most feeling terms to the loss which the Society had sustained in the death of Dr. Hillier, and to the interesting event which signalised the occasion, by the election to the honorary membership of the Society of six such distinguished men as Bernard, Virchow, Ludwig, Louis, Bruecke, and Billroth. The occupancy of the presidential chair by Mr. Simon terminated on Tuesday last. That gentleman may well be satisfied with the scientific work and general progress of the Society during his term of office, and with the general character of the different meetings over which he has so ably presided. The retirement of Dr. Murchison from the post of secretary was not forgotten, and special reference was made to the valuable services he has rendered the Society.

MEDICAL INSPECTORS UNDER THE POOR LAW.

WE wish to call attention to the letter of our correspondent, "Nunquam Dormio," which appeared in THE LANCET of last week, and to urge our readers to avail themselves of any opportunities that may offer to explain to members of Parliament the necessity of appointing medical inspectors to supervise the administration of the Poor Law. The recommendations of the Lords' committee, and the utter and notorious failure of the system of so-called inspection that has sprung from the legal predilections and the incorrigible nepotism of recent rulers at Gwydyr House, afford ample grounds on which arguments may be based. We would, how-

ever, carry the question still further. The medical appointments hitherto made in connexion with the Poor Law have been so unfortunate, that they might almost as well have been legal. A scientific chemist on the one hand, a consulting physician and journalist on the other, must surely have been selected because in them all the special experience which would qualify general practitioners for their offices was conspicuous by its absence. In their hands the profession has been like Paddy, when he was conveyed from place to place in the sedan that had no seat and no bottom. But for the name of the thing, he might as well have walked. We have had the name of a medical element at the Poor-law Board; and we have not only walked, but walked in the mire. We want a medical element that shall be a reality, affording practical knowledge and matured experience of the matters actually at issue. We want men who have lived and laboured among the poor, who have been parish doctors, who understand alike the guardian, the ratepayer, and the pauper, and who know by heart the various social strata with which they would have to deal. Such men could be found in any number amongst the ranks of general practitioners; and it is to general practitioners, and, for provincial districts, to country practitioners, that the Government must look for good and efficient servants—men who will know their business, instead of having to learn it by their blunders. We hear that no decision has as yet been formed at the Poor-law Board upon this question; but we hope that the force of public opinion will render any long hesitation impossible; and we call upon the profession to aid in forming that opinion, and in guiding its action and its demands.

"KILLING NO MURDER."

THE daily papers have lately contained an account of a case which forcibly illustrates the want of medical supervision of police cells. It appears from the evidence adduced at the inquest, that a woman named Hannah Saunders, aged fifty-five years, and the wife of a cab proprietor, had become much disturbed in mind by some domestic trouble; and that on Saturday night she endeavoured to drown herself in the Regent's Canal. A policeman heard the splash, and, running to the spot, he saw a woman in the water. He managed to draw her out alive, and had her carried to a public-house near. There all her clothing was stripped from her, with the exception of her chemise; that, wet like the rest, was left upon her. A surgeon was called, and when he had pronounced that she might be moved, she was placed on a stretcher, and would have been carried to the police-station without any covering except the chemise, if it had not been for a fruiterer near, whose sense of decency prompted him to throw a sack over her. She was then taken to the station, and placed in the cell in which drunken cases are placed at night. She lay there twenty-four hours, and then died. Attempts were made by her husband to bail her out, and also to obtain a bed for her in the cell; but neither could be done. The police surgeon, who was called in after death, said that he had made a post-mortem examination, and had found that the poor woman had suffered from disease of the heart and liver; the lungs were inflated and distended with water; and that the immediate cause of death was the shock following sudden immersion in the canal. Great care ought to have been taken to prevent a fatal result. Attention and warmth were absolutely necessary; and he did not think the police cell was quite a fit place for the woman to be put into. She ought to have been removed to an hospital; and if he (the surgeon) had been called earlier, he should have ordered her removal.

This disgraceful case has been followed by a letter to *The Times* from Dr. Painter, formerly surgeon to the police at Bow-street, urging that nothing should be left to the discretion of the police in cases of illness or of supposed drunkenness, but that medical aid should always be obtained in order to decide what should be done. Dr. Painter bears testimony to the generally sound discretion exercised by police inspectors, and rests his counsel upon the obvious impropriety of requiring any class of men to determine questions with regard to which they have had no special training. We do not doubt that his favourable testimony is, as a rule, well merited; but we cannot forget that cases of death in police cells every now and then occur, and that to mistake apoplexy for intoxication is by no means uncommon. In this particular case it seems difficult to exaggerate the impropriety of the course that was pursued. The expression of the surgeon, that the police cell was not "quite" the place in which the deceased should have been suffered to remain, seems to us also to call for the most unqualified condemnation; and it is indeed difficult to speak of any part of the subject without using somewhat unparliamentary language. The poor half-crazed old creature, throwing herself into the water in the frenzy of her troubled brain, dragged out again and stripped in the public-house, carried almost naked to the police cell, left there on a bare bench, with only her wet chemise, with no bedding, and, as far as it appears, no food, to linger through the long night and over the Sunday, and then to die of shock and cold and exposure, in the very hands of the officers of the law, and within the hearing of church bells in a Christian country, presents a picture altogether so hideous that we hope it may be long before we are called upon to chronicle such another. If such neglect as that by which this poor woman was suffered to die is not criminal, it is high time that the law should make it so. There could be but two reasons why the divisional surgeon was not summoned during life: one, the trouble of fetching him; the other, the amount of his fee. It is not too much to ask that the life of a wife and a mother should be counted as of greater value than the wear of a policeman's boots or the cost of a doctor's visit. It is said that the police force will shortly be to a great extent reorganised, and we cordially join with Dr. Painter in his demand that this reorganisation should relieve well-meaning constables from medical responsibilities, and should secure the sufferer from apoplexy, or lunacy, or poisoning, against being confounded with and treated as the common criminal or drunkard.

After a long consultation, the jury returned a verdict to the effect that death had resulted from the shock consequent upon the deceased plunging into the water whilst she was in an unsound state of mind; and they censured the police for not having in the first instance sent for the divisional surgeon, and for having left the woman in a cell through the night, instead of taking her to an hospital or to a workhouse infirmary. But the censure of a coroner's jury goes for very little; and in these cases we require intelligent prevention, instead of tardy and unavailing regret.

HAIR RESTORERS.

CONSIDERING the number of advertisements of preparations for the hair with which almost every paper we take up teems, promising speedy and infallible remedies for every defect or deficiency, it is not a little remarkable and contradictory that one should still behold amongst one's friends and neighbours so many grey and bald heads. As far as we can judge, the number is not less now than it was when we ourselves were young, and before our parting became wide or our hair tinged with silver grey. Is the hair grey?—forthwith one tribe of advertisers promises to restore it to

its original colour in almost less than no time. Has the scalp become denuded for years of its chief ornament?—another set offers to clothe it afresh with rich and luxuriant tresses. Is the hair lank and straight and lustreless?—a third class of hair restorers advertises a variety of nostrums for rendering it curly, glossy, "beautiful for ever."

The fact that the majority of hair dyes and washes are made up of constituents which not only injure the hair, but are capable, if absorbed, of seriously affecting the health, is pretty widely known; and denunciations of these hair preparations have from time to time appeared in the public press. These denunciations, however, have been for the most part too vague and general to effect much real good. The advertisements go on much as they did before, and the public still continue to be purchasers. In the case of the adulteration of articles of food and drink we found that merely general statements produced little result, but that when the vendor or manufacturer was made personally responsible the deterring effects were rapid and marvellous; and the same remark is equally applicable to the present subject.

One of the best known and most extensively advertised preparations for the hair is Mrs. S. A. Allen's World's Hair Restorer. On the label it is affirmed that it is the "best" of all hair restorers; and the reasons given for its being the best are—"Because it contains no nitrate of silver, nor any other injurious ingredient. Because it does not dye the hair, but acts directly on the roots, giving them natural nourishment. It contains the specific aliment which is the life of the hair, and in this way the natural colour is restored."

We will now put these statements to the test by reference to the actual composition of the article. We find, then, that it is composed of acetate of lead, sulphur, and glycerine. Now lead, while it is one of the most frequent constituents of hair dyes, is also one of the most if not the most injurious. It will thus be seen how utterly worthless are the statements above quoted, and that the assertion as to the preparation containing "the specific aliment which is the life of the hair" is a mere fiction.

The detection of lead in a hair dye or wash is very simple, and may be readily effected by adding a few drops of a solution of iodide of potassium to a small quantity of the dye, when, if a soluble salt of the metal be present, it will be revealed by the curdy yellow precipitate immediately produced.

OPIUM IN DIABETES.

THERE is nothing novel in the use of opium in diabetes, but there is something new in the mode and results of its exhibition as portrayed by a case which Dr. Pavy brought before the notice of the Clinical Society at its last meeting. The instance was that of a female, aged sixty-eight, who was apparently cured by the narcotic, without restriction as to food. The patient was placed in May upon the ordinary middle diet of the hospital, which included an allowance of bread, potatoes, and beer. She was also ordered four ounces of brandy, and two bottles of soda-water per diem; and this mode of living was continued as long as she remained in the hospital. The opium given was in the form of a pill, three times a day, and the dose was gradually increased. At the outset the quantity of urine was 100 oz., the specific gravity 1040, the quantity of sugar per oz. 32½ grains, and the amount of sugar for the twenty-four hours, 3275 grains. Within three weeks the quantity of opium administered was raised to ten grains and a half per diem. It was then suddenly discontinued on account of a greater degree of drowsiness than was desirable being produced; but in a few days it was recommenced, and this time, being more gradually increased, was borne without producing any sign of disturbance. The sugar disappeared on July 31st, and remained absent as long as she continued in the hospital,—namely, until October 28th. At the time the sugar disappeared, the patient was taking nine grains of opium per diem. It was afterwards still further increased to twelve grains, and then gradually diminished until October 17th, when all was taken off, the patient during the remaining time taking no medicine, and passing no sugar. Dr. Pavy brought some urine, freshly passed, to the Society, and this, upon being tested with the cupro-potassic solution, was seen to be free from sugar. Dr. Pavy thought there was still much to be learnt about the extent of the power of opium in different cases. His belief was, from the case which formed the basis of his communication, and other experience that he had had, that it would be found sufficient of itself in many instances, amongst elderly subjects, where the disease was observed to assume its mildest form, to check the elimination of sugar. In young and middle-aged subjects, however, where the disease as a rule assumed a much more severe character, his experience was that, to obtain a similar effect, the restricted diet must be conjoined. The success of the treatment is interesting, and we have thought it deserving of special notice.

THE STRAND "DEAD-HOUSE."

THE letter of Dr. Burney Yeo in *The Times* of Saturday last, referring to the disgraceful manner in which the authorities of St. Mary-le-Strand dispose of the bodies of persons dying suddenly within that parish, will not, we trust, be allowed to pass from public recollection until some steps are taken to remedy a state of things against which every feeling of humanity and decency recoils indignantly. A gentleman who had spent more than thirty out of the sixty-two years of his life in the public service died suddenly of heart disease last week in his room at the Audit Office, Somerset House. Contrary to the suggestion of Dr. Yeo (who was summoned from King's College), that the body should be deposited in some convenient room in the office to await the coroner's order for a post-mortem examination, the Audit-office authorities, having apparently no care for anything but getting rid of what could be of no further use to them, required the parish officials to remove the body, which was, as Dr. Yeo states, "carried down several flights of stairs, out of the office, out of Somerset House, and thrown into the engine-house at the back of St. Mary's Church in the Strand." In this place, described with perfect truth as a mere shed which would afford indifferent accommodation for a pig, Dr. Yeo had to make the post-mortem examination, the only light available being from a sort of trap-door communicating with the churchyard or from the open door giving exit directly on the traffic of the crowded Strand. So straitened was Dr. Yeo for room in executing his task, that he was literally obliged to put the heart, lungs, &c., as he removed them from the body, through the trap-door on to the pavement of the churchyard, where they were in full view of passing drivers, as well as of inquisitive urchins, whose climbing propensities were stimulated by the knowledge that something was going on in the shed. Facts such as these shame our boasted humanity and civilisation, and warrant us in holding up to public execration both the callous officialism which could treat the remains of an old and respected public servant like those of a dog, and the parochial obstinacy which ignores the obvious intention of the Legislature (albeit expressed in *permissive* language only) that proper places for the reception of dead bodies awaiting post-mortem examination should be provided by local authorities wherever necessary. Are the rooms at the Audit Office so fully occu-

pied by clerks that not one could be spared in which for a few hours the body of a colleague who had passed thirty years of his life among them might rest prior to its final removal? Why not, if no other alternative offered, have made use for this purpose of the room set aside for the special behoof of the office rifle corps? Indeed we hope that strict inquiry will yet be made by the Government, so that the public may learn by what authority (putting the humanity of the transaction aside) the body was removed from the place of death contrary to the direction of the medical man, who no doubt saw good reason for wishing that it should be disturbed as little as possible. Such a removal as took place in this case, if not absolutely prohibited by the letter of the law, was, in our judgment, opposed to the manifest intention that, wherever possible, the post-mortem examination should be made under circumstances most likely to disclose the real cause of death.

We would ask anybody who wishes to understand why we write so strongly on this subject to go to the south-east corner of St. Mary's-churchyard in the Strand, and inspect for himself the place in which, should he happen to die suddenly in that parish, his body would be placed pending an inquest to be held at the adjacent sporting public-house. The entrance bears the words "engine-house" on its two low narrow doors, and one has to stoop to go inside. It is a rickety structure of old boards, parted at about half its length (the inner half holding the engine probably), and in the closest proximity to a large and greatly frequented urinal.

We trust that we have said enough to make it clear to the dullest apprehension that such shameful neglect of duty on the part of the Strand authorities ought not to be allowed to continue. The 28th section of the Sanitary Act empowers them to provide a mortuary properly fitted for the decent reception of the dead and for post-mortem examinations, and the parishioners will surely now compel them to put that provision in force. Meanwhile the Strand "dead-house" remains a disgrace for which there is no sort of excuse.

THE PHARMACY ACT.

THIS Act came into operation on the 1st of the present month. It is satisfactory to know that, partly in consequence of the strong representations which we felt it our duty to make, it has since been semi-officially declared that the operation of the Act will not be allowed in any way to interfere with the rights of medical practitioners. We think it as well to mention this fact once again, because there still exists considerable discomfort and doubt in the minds of some members of the profession. The technical alterations necessary legally to secure the rights of the profession will be made, no doubt, at an early period in the next session of Parliament. We cannot doubt that amongst the consequences of the Act will be the better protection of the public against intentional and accidental poisoning; for, of course, persons can now obtain poisons only under rigid restrictions. The seller of poisons is required to be a properly licensed individual—or, in other words, a skilful pharmaceutist, and therefore is likely to be circumspect in his sales. This will affect quacks of all kinds. Then, again, there are penalties for the adulteration of drugs, so as to provide against the dangers resulting from the admixture with remedies of pernicious substitutes.

We hope that the provisions of the Act will be enforced with rigour. The Act is capable of effecting much good, of protecting the public to a very great extent against the evils which have long resulted from the careless way in which dangerous drugs have been handled and sold, and which have been a disgrace to the age. We anticipate, too, that something may now be done to diminish that most heartless practice which largely prevails in some districts, of drugging young children with "quietners," administered systematically, to prevent interference with the ordinary occupation of mothers or nurses.

THE HONORARY MEDAL OF THE COLLEGE OF SURGEONS.

WE understand that the Museum Committee of the College of Surgeons has recommended the Council to present the honorary medal of the College to Mr. W. L. Crowther, a member of the College, whose valuable additions to their comparative anatomy museum have been so frequent. The full-grown male sperm-whale or Cachelot (*Physeter macrocephalus*), which forms such an important feature in the Hunterian Museum, was one of the latest and most valuable treasures which the College owes to Mr. Crowther, who, at his own expense, had the skeleton prepared from a specimen which was taken off the coast of Tasmania in 1864. Mr. Crowther's membership dates from 1841; and his name might well be coupled with that of Dr. Fayrer for the special honorary fellowship, in accordance with our suggestion of last week. And we trust that the propriety of not demanding the usual fees in these exceptional cases would commend itself to the College authorities.

The honorary medal has been bestowed only four times—viz., to James Wilson in 1800, to James Parkinson in 1822, to Joseph Swan in 1825, and to George Bennett in 1834. The bye-laws regulating its bestowal are sufficiently vague, as they leave all conditions to the Council, with one exception, which may possibly account for its rare bestowal—namely, "that the honorary medal shall not be awarded to any member of the Council."

PAUPERISM AND THE POOR LAWS.

THE adjourned debate on Dr. Stallard's paper upon these subjects was resumed and concluded on Monday night at the Whittington Club, under the presidency of Mr. Samuel Morley, M.P., and with the participation of Mr. Locke, M.P., Mr. R. Rawlinson, C.B., Dr. A. P. Stewart, Sir W. Denison, K.C.B., the Rev. Mr. Kitto, and a large assemblage of gentlemen practically interested in the questions that were raised. The proceedings occupied nearly four hours, and terminated by a resolution requesting the Social Science Association to afford further opportunities for the discussion of problems that seem almost insoluble.

In England, we apprehend that what the penny newspapers call "ventilation" is a necessary prelude to reform; and the chief objection to this "ventilation" is that so much of it is performed by a mutual admiration society of quasi-philanthropists, who possess unlimited powers of talk, who buzz around all subjects with droning murmur and on heavy wing, sometimes blundering against the very question at issue, like an evening beetle against the face or the lantern of a passenger, and then again departing to career for a time in circles more remote from light. That Dr. Stallard's startling statements should have called these people into activity is a misfortune that was inevitable, and that will, we trust, be temporary. When the social reformers have had their say, the time for thinkers and workers will come; and the fact, established by Dr. Stallard, that pauperism in London has increased thirty per cent. within recent years, will be felt to call for prompt and earnest action. We fear there can be no doubt that much of what is called charity is directly destructive

of the self-respect and independence of the poor; and that it will be necessary that help, hitherto given indiscriminately, should in future be either largely curtailed, or, at least, surrounded by restrictions at present unknown. We feel strongly that there can be no real improvement as regards public relief until out-door pauperism is placed under an improved form of the official inspection that is at present confined to workhouses.

"VERY LIKE A—TAIL."

THE statement made in a paragraph that appeared in *The Times* with the above heading is in no way unworthy of credit. As every anatomist is aware, the coccyx represents an abortive tail; and if, instead of forming a curve with its concavity directed forwards, the concavity should be directed backwards, the appearance described by "'B' without a Tail" would be at once produced. The case, however, is a remarkable one; and we trust that a scientific description may be elicited from the surgeon who saw it. It would be interesting, for instance, to ascertain whether the appendage consisted of an hypertrophy of a single bone, or was composed of a series of separate bones; and, in the latter case, whether these were articulated with one another or not. The length of the tail in some of the apes, we may remark, does not materially exceed the dimensions ascribed to the appendage in question.

MEDICINE AND THE PULPIT.

LAST week we noticed the fact that a Sanitary Association had been formed in Newcastle-on-Tyne on the suggestion of the Rev. J. H. Rutherford, who is a dissenting minister, and has, comparatively lately, obtained the licences of the Colleges of Surgeons and Physicians of Edinburgh. Newcastle-on-Tyne has been on various occasions distinguished for its unhealthiness, and nothing can be more proper than the formation of a Sanitary Association. But there are some peculiarities in Mr. Rutherford's way of teaching truth on sanitary questions to which he will excuse us for objecting.

We gather from a local paper that he has delivered a course of lectures on these questions in his church, one of them being entitled, "What about Cholera?" Now, we shall not be suspected of any indifference to this question, and we think it proper that medical men should in fit places enlighten the public by answering the question. But surely a church is not the place for such a discussion. That is a place for the treatment of spiritual questions. If Mr. Rutherford is to continue the double duty of a minister and a general practitioner, he should above all things not talk "shop" in the chapel. We know that an eminent American preacher has lately sanctioned by his example this kind of thing by allowing a physiological lecturer the use of his pulpit on a Sunday night. He himself was not the lecturer. If the old themes of the pulpit are true, they are worthy of the exclusive use of the church. Mr. Rutherford's case is worse than Mr. Beecher's, for, being a medical practitioner as well as a minister, the vulgar may suppose that he is using his ministerial position for the display of his medical learning. And it is above all things necessary that a minister should be, like a certain illustrious lady, "above suspicion."

WHAT TO DO IN CASES OF SUDDEN ILLNESS.

A CORRESPONDENT wishes us to give some directions for the guidance of the public in cases of sudden attacks of illness. It is not easy in a short space to lay down instructions of this kind. But the following principles may, in most cases, be safely acted on. If the case occurs in a crowded church or other place, and especially if the patient be a lady, it may be considered a mere fainting; and the best way of relieving that is, to lay the patient down if possible, use a fan and the smelling-bottle, and as soon as the patient has recovered a little remove her into the open air. The case of a man found insensible is altogether of a graver complexion. Even here the generally safe thing is, to lay him down on his side, keeping the head a little raised; to loosen anything about the neck; allow air to play about the patient; and send for the nearest doctor. If the patient is quiet and pale, and can swallow, a little wine and water, or spirit and water, may be given, pending the doctor's arrival. If he is in violent convulsion, with foaming at the mouth, the great duty of bystanders is to control the movements of the patient so that he do not injure himself; to loosen the neckerchief; allow plenty of air to circulate, and await the arrival of a doctor. The patient cannot swallow in this condition, and the fit will in all probability pass off in a few minutes.

THE MEDICAL CORONER OF MELBOURNE ON PATHOLOGICAL "EXPERTS."

OF all unflattering doctrines recently stated, the doctrine of the inability and unfitness of ordinary medical men to make a post-mortem examination is one of the most offensive; and of all the offensive statements of the doctrine, none is so insulting to our profession as that of Dr. Youll the medical coroner of Melbourne. He seems to combine with the most complete distrust of other medical men the most perfect admiration of himself. On account of their want of special training, he has "found it necessary to be present himself in all important examinations of the body, so as to secure as far as possible accurate reports. ..... I regret to say that in all medico-legal inquiries in this colony medical men are in the habit of ranging themselves on one side or the other as partisans, the simple duty of speaking the truth being considered subordinate to that of proving a particular aspect of a case. ..... It has come to be necessary, therefore, that there should be a class of specially skilled persons competent to speak authoritatively, &c. ..... In this way medical testimony can be rescued from the not altogether undeserved contempt into which, I am sorry to believe, it has fallen." We are sorry to have to record such words spoken of medical men by a medical coroner. We should recommend to Dr. Youll a little less belief in himself, and a little more belief in other men of the same education as himself. Does he think that any class of experts that he can call into existence can overbear medical opinion as represented by those practitioners in every place who enjoy the confidence of the public? Such a proposal has been pretty well abandoned amongst us at home; and, judging from the tone of the despatches which reach us, it will have the stoutest opposition from the medical men of Melbourne.

THE CONTAGIOUS DISEASES ACT IN MADRAS.

WE have been favoured with some facts from the Annual Report for 1867 of the working of the several Lock Hospitals established in the Presidency of Madras. Lord Napier is enabled to report to the Secretary of State for India that there has been a considerable diminution in the total number of admissions into hospital for this class of diseases among the European troops during the year. The total number of women treated amounted to 1349, being a decrease of 222 on the number of the previous year. Among the troops the percentage of admissions to strength has been reduced from 21·1 in 1866 to 18·4 in 1867. The reductions at some of the military stations have been striking—as, for example, at Secunderabad, where the number of ad-

missions has sunk from 24·6 to 12·72; and at Wellington, where the percentage treated in 1866 amounted to 27·8, but now only amounts to 13·47.

Most of the medical officers call attention to the far milder character assumed by these affections among the patients of both sexes. They complain, as we do, of the difficulties arising from a limited application of these measures. The excess of this class of affections among the men of one European regiment was found to be due to the fact that they had contracted their disease at a station in which the Act was not enforced. The obvious remedy for this state of things is to introduce and extend the legislative measure all over India.

HYGIENE AFLOAT.

WE took occasion last month to refer briefly to a report lately presented to the Commissioners of Sewers by Dr. Letheby, in which the defective sanitary condition of vessels moored in the Thames was duly and properly noticed. In the autumn of 1866, when the epidemic of cholera commenced, Dr. Rooke, surgeon to the *Dreadnought* hospital ship, recommended the Committee of the Seamen's Hospital Society to institute a ship-to-ship visitation on the river between London Bridge and Gravesend. The very complete organisation of that business by Dr. Rooke, the able manner in which it was performed by Mr. Johnson Smith, and the other professional visitors engaged in the work, formed a subject of comment in most of our leading journals, and a very decided opinion was expressed by those journals that, in the interests of the floating population, a unity of sanitary supervision should be established in the port of London. The Thames Conservancy is, as the governing body of the river, most competent to deal with this important question, and there can be no doubt that legislative powers might be granted whereby the sanitary, as well as the administrative, jurisdiction of the Thames could be placed under its care and control. Many of the members of that body hold also high positions in the Corporation of the City of London. Dr. Letheby has done good service in representing to the Commissioners of Sewers the urgent necessity that exists for prompt and immediate interference. We trust that this will form one of the many important questions of internal reform that should be discussed and settled in the forthcoming session of Parliament.

THE FACTORY EXTENSION ACT.

A CORRESPONDENT of the *Standard* calls attention to two letters which appeared recently in the *Birmingham Daily Post*, animadverting upon the duties of the medical profession under the Factory Extension Act, and attempting to show that the services of the certifying surgeons are both costly and useless, since the certificates of birth are much more reliable evidence of age than any skilled opinion. The manufacturing interest is so well known to resent all interference with its supposed vested rights in human life and health, that we are not surprised to find a Birmingham writer inclined to kick against the pricks, and [vote all medical interference a bore and a sham, particularly since the manufacturer has to pay for the very inspection of which he complains. Fortunately for humanity, the "strength and healthy appearance" of every child under thirteen employed in a factory must be certified by a medical man under the Acts, 3 and 4 Wm. IV., c. 103, and 7, 8, and 9 Vict. To suppose that birth certificates may be usefully employed instead of medical inspection, displays a total ignorance of the manner in which birth certificates can be manipulated by parents who have no thought of their offspring but to get the most they can out of them. If, as frequently happens among the poorer classes, when a child dies, the next is called by the same name, what is to prevent the birth certificate of the first being used for the second? Or, without even the semblance of truth, what is to prevent one certificate doing duty for two or three children of about the same age, in different factories, and under different employers? There is no real way of arriving at the "strength and healthy appearance" of a child but by medical inspection, and it is absurd to say that the manufacturer, who gains by the child's labour, is not the proper person to pay for the necessary certificate. The estimate of £200,000 paid to the medical profession for this duty is simply an exaggeration; we only wish in the interests of the profession it contained a greater element of truth.

FRIENDLY SOCIETIES AND THEIR SURGEONS.

THE new year has found the battle of the clubs still undecided. Both sides have suffered in the conflict, but the steady and united resistance of the friendly societies has given them an advantage over the less combined action of the surgeons. Still the contest is an open one, and there are many instances in which the five shilling rate has been accepted. In Oldbury, Wednesbury, and Darlaston, and some other places in the Black Country, the surgeons are firm, and hold frequent meetings, at which the various incidents of the contest are considered, and resolutions passed to meet the exigencies of the position as they arise. By this organisation a tone has been given to the movement in South Staffordshire which renders the contest hopeful. In Birmingham the Cannon-street Provident Institution has abandoned its two and sixpence, and now asks by advertisement in the public papers for seven surgeons, offering the remuneration of three shillings per head per annum. There can be no doubt as to the course which ought to be pursued, and it is to be hoped that the absence of any application from the more respectable members will teach the members of this Society that their offer is grossly inadequate. After the last annual meeting the Cannon-street Society found itself almost without surgeons; the 28th instant should find it without a single medical officer. As the Society which resisted the first demand for increased remuneration, it is now again testing for its fellows the firmness of the profession, and the response which is returned to its advertisement will carry with it victory or disaster to the movement in Birmingham.

STREET ACCIDENTS.

DURING the year 1868 the deaths of 203 persons resulted from horse or carriage accidents in the streets of London; 65 of these occurred to children under ten years of age, and 120 to adults. Injury from horses caused 7, omnibuses 12, cabs 21, vans or waggons 45, drays 7, carts 53, and other vehicles not described 58 deaths. To the Registrar-General's inquiry whether heavy waggons and the like should be allowed to be driven as recklessly as they are now in the streets of London, we have no hesitation in saying, No, nor light ones either. At present, drivers are, as a rule, not only sublimely indifferent to the fate of pedestrians who may happen to cross their path, but are equally careless about collisions with other vehicles; and the consequences are partly seen in the statistics of death above quoted, but they are much more fully known to hospital surgeons, as well as in private practice, by effects of which the public at large know very little. We hope, that under a new Police Commissioner, the modern prototypes of that Jehu who was recognised of old by his "driving furiously," will find themselves constrained to become more mindful of life and limb.

THE DANGERS OF ENAMELING.

THAT the dangers to which enamelers of cards and other articles are exposed are not imaginary, was proved in the instance of two cases brought under the notice of the Medical Society of London, on Monday last, by Dr. Oppert. One case was that of a man of middle age, who had been in the trade for twenty-six years, and exhibits at the present time decided and severe symptoms of lead-poisoning. There is the unmistakable blue line along the gums, and, in addition, loss of sensibility and mobility of the left arm and leg, so that the gait is unsteady. The second case was that of a man who used a compound of white lead and sulphur for the purpose of glazing the straw hats that are imported from Florence. He also possesses the blue line along the gums; but the absence of any severe symptoms of poisoning is due to the use of the antidote with the poison. The materials used by the former of the two patients have been placed in our hands by Dr. Oppert, and they consist of arsenite of copper (the employment of which is stated to be followed by bleeding from the nose) and oxide of lead. Here, at any rate, are two undoubted instances of metallic poisoning in the case of men employed in the glazing of cards and straw hats. It is, of course, impossible to say how much mischief of a similar kind escapes detection. We have known enough for some time to feel that some protection should be afforded to workmen engaged upon the use of dangerous colorants in manufactures.

THE BIRMINGHAM BOARD OF GUARDIANS.

AT a recent meeting of the Birmingham Board of Guardians the following important resolution was carried, on the motion of Professor Clay: "That the Board take into consideration the whole question of out-door medical relief of this parish, with a view to revising the same; that the matter be referred to a committee, and that the committee be empowered to have the several district medical officers examined thereon." We are glad to find so able a member of the profession moving in this matter, and we trust that the deliberations of the committee will result in an improved method of administering out-door medical relief, as well as in a more adequate remuneration of the medical officers.

For the appointment of resident medical officer to the workhouse, rendered vacant by Dr. Robinson's election as public vaccinator, there are several local candidates in the field.

PROPOSED FREE HOSPITAL FOR SICK CHILDREN, NOTTINGHAM.

IT is proposed to have an hospital for sick children in Nottingham. Such hospitals are a necessity in most towns, and especially in large manufacturing towns like Nottingham. There is one detail of this scheme which we highly approve: the admission is to be free, on application, according to the room and the means provided by gifts and subscriptions. The worst cases are to be admitted first; and the propriety of admission and the urgency of the case are to be decided by the medical officers. This last rule cannot be too highly praised, as securing the best use of the beds of the hospital. Another feature of this proposal, however, we cannot so highly commend. It bears the impress, on the very face of it, of a sectarian scheme. The nursing is to be by religious sisterhoods; and we gather from the advertisement that even the medical officers have been selected by the promoters, and not elected by the votes of the general public of Nottingham. It says little for our Christianity if it cannot act for the relief of sick little children without being so identified with the shibboleths of religious party; and we put it to the promoters, who, we are sure, are moved by the most benevolent motives, whether they cannot make their scheme yet nobler by making it wider, and detaching it from all sectarianism.

BAD DRAINS.

A CORRESPONDENT describes in the *Daily News* of Monday a disgraceful arrangement of drains "in a good house in one of the best squares on the Bedford estate," which was fortunately discovered and remedied ere much damage was done. Smells came from the *upper* stories, and it was found that the rain gutters on the roof discharged into a broad open pipe which also received the soil from two waterclosets. Necessarily therefore the pipe conducted to the roof of the house the foul gases from the common sewer. The writer remarks,—"Talk of fever and pestilence creeping through the drains into our kitchens; here they were nestling in the roof over my sleeping children." That, under similar circumstances, fever *will* attack the inmates of a household, has been shown by Dr. Buzzard, who describes in THE LANCET of Nov. 7th, 1868, how seven persons were attacked with typhoid in a house where the rain-pipe was employed as the soil pipe of a watercloset. We are tired of inveighing against the ignorance of builders on these points. When the public generally has succeeded in acquiring a faint idea of the dangers, as well as the unpleasantness, attaching to the entrance of sewage gas into their dwellings, we may expect a gradual improvement in the first requisite of health in a civilised community.

LEAD-POISONING ON THE TYNE.

A VALUED correspondent reminds us of a fact of which we were not altogether ignorant—that there is a great amount of lead-poisoning involved in the various works on the Tyne. He says "it is pitiful to see the number of young girls suffering from lead." It is not improbable that this subject of lead-poisoning will be brought before Parliament. It is of sufficient importance to be a matter of inquiry, whether we consider the suffering involved in lead-poisoning, or the frequently early disablement of the sufferer in various ways. It is about the height of injustice to see a poor man or girl first in the course of their employment poisoned with lead, so as to be rendered unfit for work, and then quickly and heartlessly discharged when unequal to the work which has poisoned them.

THE NAVAL MEDICAL SERVICE.

THE official Navy List for January shows some addition to the members of the naval medical profession since the corresponding period of last year. Only one promotion to the rank of Inspector has taken place during the past year—that of Dr. Salmon. The two vacancies in the list of Deputy Inspectors, caused by the sudden death of Dr. Beith and the promotion of Dr. Salmon, have been filled by the promotion of Drs. Nelson and Pottinger, the number remaining at 15 as before. The list of Staff Surgeons has only grown in the year from 85 to 91, although 13 Surgeons have been promoted during the year, the balance being struck by promotion, retirement, and death. There are now 177 Surgeons, against 183 last year; and of these only *seven* have been promoted during the year—a smaller number than has occurred within the memory of the oldest "salt." The Assistant-Surgeons, who numbered 240 last year, have increased to 245; but as the Admiralty appears to have entrapped thirty-two youths during the twelve months, and has promoted but seven of their seniors, there remains

a balance of twenty assistant-surgeons, who appear to have been "expended," to use the correct nautical expression. We know that, unfortunately, some of these vacancies have been caused by death on duty; but the majority have resulted from that tendency to resignation which leads to the active rather than the passive conjugation of the verb "resign," on the part of gentlemen who have had one or two years' experience of the Royal Navy.

LIGATURE OF THE LINGUAL ARTERY.

ON the evening of Friday, January 1st, Mr. Christopher Heath tied the left lingual artery in a patient in University College Hospital, for hæmorrhage from a cancer involving the left half of the tongue, which resisted ordinary treatment. The ligature was applied in the digastric triangle by cutting through the hyo-glossus muscle, and the artery was reached with comparative ease. There has been no recurrence of the bleeding, and the growth has considerably diminished since the operation.

THE MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.

DR. R. M'DONNELL, with a generosity which does him infinite credit, and shows his unselfishness, has intimated his intention of paying over, in the future, the pension assigned him by Government as late medical superintendent of the Mountjoy Prison to the Royal Medical Benevolent Fund Society of Ireland, and has forwarded a cheque for the first instalment to the secretary of the Society, expressing a regret that the sum is not larger than it is. A sum of £121 19s. 2d., left under the will of Dr. Kingsley, the founder of the Society, has been handed to the treasurer.

THE GAS EXAMINERSHIP OF THE CITY OF LONDON.

THE election of a Gas Examiner for the City of London, in consequence of the resignation of Dr. Letheby, is now exciting considerable attention; the more so as the salary offered has recently been increased from £200 to £500 a year. A great number of candidates already exist, among whom are Dr. Whitmore, Dr. Septimus Gibbon, and Prof. Redwood. It appears to us that the last-named gentleman is specially fitted for this important post, inasmuch as his well-known reputation is an all-sufficient guarantee that the work would be skilfully and properly performed; and we believe that the Corporation would be most fortunate in securing the services of so distinguished a chemist.

THE RECENT EPIDEMIC OF TYPHUS IN NAPLES.

THE epidemic of typhus which recently prevailed in Naples has now almost completely died out. The Italian journals give the following statistics of the havoc which was created, and show how dearly the non-observance of sanitary laws is paid for by a neglectful population. Our readers need not be informed of the filth and foulness which pollute Naples. Up to the date of August 31st, at which time the epidemic had lost its intensity, the various hospitals had received 5151 patients, of whom 603 died, making a proportion of 11⅞ per cent. The number of cases observed in the town amounted to 2708 cases, of which 683 terminated fatally, thus giving a proportion of about 25¼ per cent. The total number of cases amounted to 7859, with 1283 deaths; in other words about 16¼ per cent. mortality. It is curious to note that the mortality in the town was double that which occurred in the hospitals.

AT the monthly meeting of the Committee of the Medical Benevolent Fund held on Dec. 29th the amount distributed was £70, the number of recipients being ten. On Tuesday next (Jan. 12th) the annual general meeting of subscribers will be held, after which the report will be issued, and an appeal made to the profession for further support. The following donations are thankfully acknowledged: James Paget, Esq., F.R.S., D.C.L., £25; Mr. Stocker (by Dr. J. S. Stocker), £5 5s.

AN important sanitary measure has just been adopted by the municipal authorities of Paris. Hitherto, new-born children were obliged to be taken to the respective *mairies* to have their names inscribed on the register of births. This was a fruitful cause of disease and infant mortality. The baneful custom is now done away with, and the French Government has directed that in future medical men attached to the État Civil, or municipal institutions in Paris, shall, on being informed by the parents, repair to the children's domicile, and there register their birth.

MR. GENTLES, medical officer for the south district of the Derby union, has reported to the guardians that during the last half year scarlatina has been very prevalent and fatal, causing 15 out of 39 deaths. The chairman expressed the opinion of the Board that Mr. Gentles' report was a most excellent one, and that they quite agreed with the remarks he had made on the means necessary to diminish disease. We may anticipate, of course, that something practical will follow from this satisfactory coincidence of opinion on the part of the Board and their medical officer.

WE are happy to notice that Liverpool no longer occupies the unenviable position of lowest on the Registrar-General's returns. Thanks to the efforts of the Health Committee, the death-rate has so diminished that it is able to take a fifth or sixth place. The last return of Dr. Trench gave 248 deaths within the borough in the week, 101 being of children under five years of age.

THE number of the medical profession in the colony of Victoria is on the decrease. During the past year only sixteen names were added to the register. Of these about half are re-registrations; and as there have been at least half a dozen deaths, and as many leaving the colony, the present number is something less than it was at the beginning of the year. In 1867, on the contrary, there were thirty-five additions, and the deaths were not more numerous than in the past year. This lessening of the number of medical practitioners is indicated by the fact that at the present moment there are six houses to let in Collins-street, the medical quarter of Melbourne. Four years ago houses were at a premium in this street, one gentleman having given £100 to become the tenant of one of the more eligible residences. The dearth of unemployed medical men has been further instanced by the Committee of the Melbourne Hospital having elected on the resident staff two of the senior students of the university.

THE *Pall Mall Gazette* states that the Poor-law Board have in contemplation the introduction of certain reforms in the present system of relieving casuals, and have solicited by circular an expression of opinion from the various boards of guardians upon the proposed alterations. It is intended to make uniform the dietary and amount of task-work in all the unions in the country, and the Board have submitted for the consideration of the local guardians a not too liberal scale of diet and a fair average task. The Board insist upon

the enforcement of the bath, recommend the system of separate sleeping cells, and make various suggestions for the curtailment of the comforts of casuals.

A MEETING of the Salisbury Medical Society was held in the committee-room of the Salisbury Infirmary on Wednesday last. A paper was read by Mr. Coates on the Treatment of Desquamative Nephritis, by Mr. Davis on Suppression of Urine, and by Mr. Marshall on a case of Puerperal Convulsions.

MEASURES are now under consideration at Liverpool for enforcing a stricter compliance with the provisions of the Vaccination Act, both as regards vaccinations and their due registration.

THE PATHOLOGY AND TREATMENT OF UTERINE FLEXIONS.

WE have received numbers of the *California Medical Gazette* for October and November, 1868; and find in them, among much interesting matter, two papers under the above title, by Dr. John Scott, of San Francisco, Surgeon to the California State Women's Hospital. The recent discussions in this country impart additional interest to these papers, and the views and practice of Dr. Scott seem to us to be sufficiently original and important to deserve the attention of our readers. We therefore give a summary of what he has written on the subject.

Dr. Scott is of opinion that some malposition of the uterus exists in nearly all chronic uterine affections, especially in cases of erosion of the os, with hypertrophy of the cervix; and he attributes the discomfort and impaired health of the patient, which often continue after all *visible* disease is removed, to the effects of the displacement. He points out that the speculum and the position used by Dr. Marion Sims are the only ones that render it possible to determine exactly what is the shape and direction of the uterus; and leads up finally to the conclusion that "the *true pathology* of uterine displacements will be found in the existence of *chronic inflammation of the organ, and the results it entails*; and, if this opinion is correct, the treatment based on it will embrace at one and the same time the removal of the malposition which exists and the affection which has produced it.....In this way we can perceive how the effusion of fibrin in either wall of the uterus will lead to an ante- or a retro-version, while a more uniform enlargement of the organ will tend to its prolapse."

After discussing at some length the differences of opinion, about the importance of flexions, that prevail, it seems, in the New World as well as in the Old, Dr. Scott expresses his own opinion as follows:—

"In *recent* cases, and before the uterus has become fixed in its position, it is quite possible, by rest, local depletion, and saline aperients, with tonics, to effect a restoration of the uterus to its natural position; but when the affection has become chronic, and effusion of fibrin into the parenchyma of the organ has taken place, the malposition remains and perpetuates itself till measures of a more radical and comprehensive nature are adopted for its removal.

"If a uterine version is not a *dislocation* of the organ—whether produced gradually or suddenly,—I know not what it is; and to leave it in a position where, by its pressure on adjacent organs, it interferes with their proper functions, while its own circulation and nutrition are at the same time injuriously affected, is to sanction a practice which can scarcely be called either scientific or rational."

The author next proceeds to the consideration of treatment; and, after giving an opinion very decidedly adverse to pessaries, describes his own methods of proceeding in language which we will quote at length.

"In entering on the treatment of retroflexion, the first and most important point to determine—a point which I have not seen insisted on—is, the existence or non-existence of adhesions; for in one case, where the uterus is free, we can confidently hold out the hope of a perfect restoration of the organ to its normal position and integrity, as the result of the treatment; whereas, in the other, our prognosis must be guarded, and while we anticipate such a marked and permanent improvement in the general health, and such a relief from local suffering, that the patient will cease to suffer from the affection, yet we may entirely fail to rectify the malposition itself. Taking, therefore, a case of simple retroflexion, we shall find the uterus bent on itself, generally enlarged, more or less tender on pressure, capable of being lifted up into its natural position by the cautious use of the sound in its cavity, but gradually falling back into its position on its withdrawal. The cervical canal is in the form of a bent tube or syphon, and at the point of flexure behind, an inch and a half from the os, the induration previously noticed will be found.

"The treatment must be both general and local. While the functions of all the abdominal viscera are seriously interfered with, the portal circulation is especially deranged, as evidenced by the frequent occurrence of rectal disease in the form of hæmorrhoids, prolapsus ani, fissures and ulcerations; and, as a consequence, the secretions of the liver are not only seriously disordered, but that viscus is constantly the seat of a passive congestion, which exerts an important influence on the health and spirits of the patient. To remedy this state of things, mercurial alteratives, and aperients, such as castor oil, or compound jalap powder, should be given at intervals during the first month; afterwards, small doses of bichloride of mercury, with vegetable tonics, such as calumba or cascarilla, with muriate of ammonia, will be found all that is needed till convalescence has advanced, when the preparations of iron and quinine will be found of the utmost value. To assist nature in restoring the uterus to its normal position, the following operation is then performed, and the proper time for its execution is the first week after the cessation of the catamenia, the patient's bowels having been freely acted on the day before. The patient lying on the left side, with the knees drawn up, and the left arm behind the back, Sims's speculum is introduced and firmly held by the nurse. The anterior lip of the os is then seized by Sims's tenaculum, and with the long elbow scissors described by Emmet, it is divided to the extent of about half an inch. The ordinary uterine sound is then introduced, and the organ having been with its aid restored to its natural position, it is withdrawn, and replaced by the small silver probe, which is handed to an assistant, who is directed to retain it *in situ*, with its concavity forward. And if the patient is directed to lie with the body inclined forward, the organ will readily gravitate in that direction. Sims's knife (as improved by Emmet), with the blade in a line with the shaft, is then introduced, with the edge backwards, through the os and *above the fissure*, and this latter is divided by an incision which extends along the back wall of the cervix clean out to the os externum. The knife is again passed in with the edge reversed, and another incision is made along the front wall, beginning opposite the commencement of the first incision, and terminating in the division of the anterior lip made previously by the scissors. In the absence of woodcuts, too expensive for a young journal to furnish, I feel it difficult to convey a correct idea of the depth to which these incisions are carried, but I hope it will suffice to say that they must be regulated by the amount of adventitious deposit and hypertrophy which exist, and which vary in almost every case. They must be sufficiently free to accomplish the object in view, while such a division of the uterine tissues as would interfere with the future integrity of the organ must be carefully avoided. But little bleeding may be expected; but what does occur should be encouraged to the extent of four or six ounces, as a salutary depletion from the engorged tissues. Future hæmorrhage may, however, occur; and to provide against it, and *prevent the premature closure of the incision*, small pledgets of cotton, dipped in a solution of perchloride of iron and glycerine, in the proportion of one of the former to two of the latter, should be introduced in succession within the cut surfaces till all bleeding has ceased. The

cotton must first be wetted and squeezed out before dipping it in the solution, and while the os is held by the tenaculum they should be pushed up by means of the long small pointed uterine dressing forceps, and finally a large pledget dipped in the solution left in contact with the os, to which it will readily adhere. Further tamponing of the vagina is unnecessary, and only adds to the discomfort of the patient. The after-treatment is most important. The patient should be put to bed for at least ten days, and the recumbent posture rigidly enjoined for the first six or eight weeks, to provide against the gravitation of the organ backward, which sitting up or walking about would naturally produce. On the third day after the operation, the external pledget may be withdrawn, and the vagina washed out by a gentle stream of tepid water. The internal pledgets must be allowed to come out of themselves, as the result of suppuration, and this will be effected in about three days more. The probe must then be passed through the line of incision, to break up any granulation or attempt at adhesion, and this must be continued at first every day, and afterwards every second day, till the occurrence of the next menstrual period. At each visit we should, after passing the sound through the incisions, elevate the uterus to its natural position, and having anteverted it as much as possible, the posterior cul de sac of the vagina should be tamponed with cotton soaked in glycerine, as an admirable support to the weakened organ. The pledgets should have a string attached for their withdrawal before bedtime, for a longer continuance than from six to eight hours will generate heat and discomfort in the vagina, and tend to produce an irritation of the parts. This local tamponing must be continued daily till the uterus has returned to its right position, and manifests the power to retain it; and I need scarcely add how important it is that during this time no local accumulations in the rectum should be allowed to impede its ascent.

"Under this treatment it is most gratifying to notice the uterus ascending from day to day to its natural position, so that on examining our patient after the cessation of the next menstrual period, we may find the retroflexion gone, and the organ, in some cases, actually slightly anteverted; but in severe cases a degree of retroversion of the fundus will still exist, which will, however, disappear under the influence of the after-treatment. The uterus is, however, still larger and heavier than natural, and consequently occupies a lower position in the pelvis than it should do, and our efforts must now be directed to the removal of that state of chronic disease of the lining membrane of the cavity with which it is invariably associated, while we at the same time stimulate the absorbents to remove redundant tissue.

"The precise nature of this affection I will not further discuss, than by stating that I believe it consists in hypertrophy of the mucous membrane, with enlargement of its follicles, accompanied by a tenacious, ropy secretion, considered as characteristic of chronic endo-metritis, of a very intractable nature, and for the removal of which I entirely rely on the judicious use of sponge tents, followed by injections. I have for some time entirely discarded the use of solid caustics of any kind, in the interior of the uterus, as uncertain in their action, painful in their application, and unsatisfactory in their results; and I believe fluid medications will eventually take their place, if but properly used, and their *modus operandi* correctly understood.

"A day or two after the cessation of the catamenia, a sponge tent, *just large enough to enter the canal easily*, should be inserted, and after a lapse of six or eight hours replaced by a larger, which can be worn till the following day. The patient then lying in the semi-prone position, with the speculum introduced, the tent is gradually withdrawn by means of the sponge-tent forceps, and the instant it is found emerging from the os a sponge probang is pushed up to the latter to prevent the sudden ingress of air into the cavity which would otherwise take place. The cavity is then washed out by tepid water gently injected several times; and all discharges having been removed by sponging, about a drachm of the compound tincture of iodine, or a combination of carbolic acid, glycerine, and tincture of iodine, or a solution of permanganate of potash, in the proportion of thirty or forty grains to the ounce, is injected into the cavity of the uterus.

"After a lengthened trial of various medicines, I find that the following combination is the most suitable, as being entirely free from risk, permanent in its results, and not productive of the pain which other injections are liable to produce. The solution consists of carbolic acid one part, glycerine three parts, tincture of iodine four parts; and its application to these cases is universal.

"The instrument I use for injection consists of a hard rubber tube, bent like the uterine sound, and attached to a hypodermic syringe which holds one drachm; and having passed it well up to the fundus, I throw in the fluid, guttatim, to prevent any of it passing into the Fallopian tubes, though I consider such an occurrence as most improbable with the most ordinary care. No precautions are necessary for guarding the vagina beyond the passing a sponge probang close to the os, to absorb the fluid as the uterus presses it out, for it does not injure the vagina, and causes no pain.

"If the canal of the cervix has been thoroughly dilated up to the fundus, the patient suffers so little from the injection that she is scarcely aware of the proceeding; but should any local pain result, the application of a very hot flannel to the hypogastrium will speedily remove it. In the preparation of the sponge tents I add carbolic acid to the gum, in the proportion of three drops to the ounce, which has the effect of medicating them, and to a great extent prevents the fetor which renders them so objectionable. The patient should remain in bed for some days after the injection, and eight days afterwards it may be repeated; or a flat curved probe, covered with cotton, and dipped in the solution, may be passed into the cavity. But *no application* should be made within less than eight to ten days before the next menstrual period. The repetition of this application after the two or three following periods will usually complete the patient's recovery.

"Injections into the uterus have been regarded as dangerous, and at best but transitory in their effects, and, therefore, inefficient in the treatment of uterine diseases. I am convinced that this opinion is most erroneous, and has arisen from the manner in which they have been used, and an ignorance of their effects. *All* injections into the uterus, even of the mildest character, are not only excessively painful, but positively dangerous, if the canal of the cervix has not been previously *well dilated*; and, if used without this precaution, will readily produce metro-peritonitis or pelvic cellulitis, with, perhaps, abscesses and infinite suffering. The canal of the cervix well dilated, injections of iodine, permanganate of potash, or the combination above alluded to, can be used without any risk, and with scarcely any pain; while their effects in modifying the whole vitality of the organ are superior to that of any substance in the solid form, safer, and more reliable."

The paper concludes with a recital of two cases of chronic uterine disease, one of nine and the other of eight years' duration, both cured within five months, and restored to "perfect health and strength." Our space does not allow us to quote these cases; and it is the less necessary to do so, since the treatment is described in less detail than in the passages given above.

THE MARSHALL HALL MEMORIAL SCHOLARSHIP.

THAT we were justified in prognosticating success to the proposal which originated in our columns in favour of the establishment of some memorial commemorative of the scientific labours of the late Dr. Marshall Hall, and the really practical results which have flowed therefrom, may be gathered from an examination of the details of the preliminary list of the General Committee, which we now publish. The list contains the names of many of the most eminent members of the profession. A very general feeling has been expressed in favour of an open scholarship or prize. The form which the memorial may take will depend upon the decision of an executive committee, to be shortly formed, composed of Edinburgh, London, Dublin, and Provincial

representatives. A wholly erroneous idea has got abroad that the prize is to be connected with University College. This is entirely the mistake of a contemporary, and has no foundation in fact. Considering that the project is quite in its infancy, the amount of support at present accorded to it is remarkable, and it is gratifying to ourselves for the simple reason that the important scientific contributions of Dr. Marshall Hall were made to the pages of THE LANCET.

GENERAL COMMITTEE.

London. — Dr. Burrows, F.R.S.; Dr. Gull; Sir Ranald Martin, F.R.S.; Dr. C. J. B. Williams, F.R.S.; Dr. Webster (Dulwich); Mr. S. Haden; Dr. Russell Reynolds; Prof. Huxley, F.R.S.; Dr. Logan, C.B.; Dr. Farr, F.R.S.; Dr. Wakley; Dr. Glover; Mr. Webber; Sir H. Thompson; Dr. Quain; Mr. C. Hunter; Mr. P. Hewett; Dr. F. Winslow; Dr. J. Risdon Bennett; Dr. Dickinson; Mr. Bowman, F.R.S.; Mr. Erasmus Wilson, F.R.S.; Dr. W. Bryant; Dr. Andrew Clark; Mr. Lockhart Clarke, F.R.S.; Mr. Brodhurst; Dr. Pavy, F.R.S.; Mr. Edwin Saunders; Mr. Solly, F.R.S.; Dr. Marcet, F.R.S.; Mr. Gay; Mr. J. Z. Laurence; Dr. Waller Lewis; Dr. Dobell; Dr. Buzzard; Dr. Marston, R.A.; Sir H. Bulwer; Mr. Curling, F.R.S.; Mr. Critchett; Dr. Hawksley; Dr. Sankey; Dr. Richardson, F.R.S.; Dr. Yearsley; Dr. Helsham; Dr. Protheroe Smith; Dr. C. B. Radcliffe; Dr. S. H. Ward; Dr. Julius Pollock; Dr. Chapman; Mr. Allingham; Dr. Diamond; Dr. Down; Dr. Easton; Dr. Grailly Hewitt; Dr. Murchison, F.R.S.; Dr. Sutro; Dr. E. Smith, F.R.S.; Dr. Sibson, F.R.S.; Dr. Tilbury Fox.

Edinburgh.—Prof. Spence, President of the Royal College of Surgeons; Prof. Syme, Surgeon in Ordinary to the Queen in Scotland, &c.; Dr. J. Matthews Duncan; Dr. Crum Brown; Thomas Annandale, Esq.

Dublin.—Dr. Fleetwood Churchill, President of the King and Queen's College of Physicians; Dr. Mapother, Professor of Anatomy in the Royal College of Surgeons; Dr. Albert J. Walsh; Dr. Quinan; Dr. Rawdon Macnamara; Dr. W. Frazer, M.R.I.A.

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Professor Rolleston, F.R.S., Sir T. Watson, Bart., Mr. Le Gros Clark, and others support the movement.

Treasurers.—Dr. Russell Reynolds and Dr. Webster.

Honorary Secretaries.—London: Dr. Tilbury Fox, Sackville-street, Piccadilly. Edinburgh: T. Annandale, Esq., Charlotte-square. Dublin: Dr. Quinan. Provincial: Dr. Ellis, Newcastle-on-Tyne.

Communications may be made to either of the Honorary Secretaries.

THE personalty under the will of the late Dr. Brown, of Windsor, has been sworn under £45,000.

MEDICAL OFFICERS OF THE ARMY.

THE following letter was forwarded by the Professors of the Army Medical School to the editor of the *Daily Telegraph*:—

SIR,—We observe in your impression of the 1st instant that you speak disparagingly of the professional acquirements of the medical officers of the army as compared with those of medical men in civil life. During the last eight years and a half all the gentlemen entering the medical service of the Army have passed through our hands: we have had to teach and to examine them. We have also had the task of reading the examination papers of the assistant-surgeons prior to promotion; and as the date of these examinations extended back to gentlemen who entered the Army in 1852 or 1853, we may claim to have a knowledge of the acquirements of every medical officer who has entered for the last sixteen years. We have also seen and served with a great number of the senior medical officers.

We are, therefore, in a position to speak with certainty of the professional knowledge of these gentlemen. We have, on the other hand, seen a great deal of the practitioners in civil life, and one of our number in particular has had unusual opportunity of knowing the qualifications of civil medical men on their entrance into practice. We beg to assure you that we speak without bias when we assert that the medical officers of the Army are in no way inferior to their civil brethren, but are, in fact, as far as we can judge, above the average. And there are also in the Army many medical men whose acquirements are quite equal to those of any practitioners in civil life, even the most eminent.

You are, perhaps, not aware of the great trouble the Government take in order to ensure proper medical attendance for the troops. Every medical gentleman desirous of entering the Army Medical Service must have two legal qualifications entitling him to practise anywhere in Her Majesty's dominions. He has then to pass an examination in London, conducted by examiners who are independent of, and, except in one instance, entirely unconnected with, the Army Medical Department. After passing this examination, in which he must reach a certain standard, he is sent to Netley, and comes under our teaching for four months, after which he has to undergo a second examination in the specialties of Army medical service. If found competent, he then enters the army; and, after five years, has to submit to a third examination, intended to ensure that he has kept up his knowledge during that term. No Government could do more for its soldiers.

It appears strange to us that, at the very time when the most signal and astonishing improvement has taken place in the health of the Army at home and abroad, the efficiency of the officers to whose labours this is mainly due should be called in question. If it be said that this improvement is due chiefly to the sanitary measures lately introduced, we admit it. But we ask to whom the credit of this sanitary movement is due? We reply, mainly to the medical officers of the army. It originated in the service. From the days of Dr. Robert Jackson until now, military medical officers have never been wanting to urge on the authorities the measures now, after so many years, adopted. It is not too much to say, that if public opinion had been enlightened up to the level of the Army medical officers' knowledge, and if the medical officer had had power to carry out their recommendations, the great improvement in the health of the soldier would have been antedated by many years. We may also add that the efficiency of the Army Medical Department, as now administered, has been tested in three wars, in China, New Zealand, and Abyssinia, and in all the medical arrangements have elicited the admiration of the most competent judges, and have had results without precedent in war.

We do not doubt, Sir, that you will modify the opinion you have expressed, and withdraw a statement as injurious as it is unfounded.

(Signed by the Professors of the Army Medical School.)

Army Medical School, Royal Victoria Hospital,
Netley, Jan. 6th, 1869.

Correspondence.

"Audi alteram partem."

A RICHLY DESERVED REBUFF.

Harewood-place, Hanover-square, Jan. 6, 1869.

MR. PAGET presents his compliments to the Editor of THE LANCET, and encloses two letters for publication, or any use that the Editor may think proper.

31, Sackville-street, London.
2, Old Steyne, Brighton, 186 .

SIR,—Knowing from experience that you must, in the course of business, come in contact with many patients suffering from chronic diseases who have failed to obtain benefit from ordinary treatment, I beg to forward you a copy of my popular work on "Curative Electricity." You will see by the advertisements of my books contained in it that I am an author of established scientific reputation.

Having had fifteen years' experience of medical electricity, and having successfully treated numerous patients, in conjunction with Sir Charles Locock, Sir Wm. Fergusson, Drs. Gream, A. Farre, and Burrows, Messrs. Paget, Skey, &c. (to whom I can confidently refer), I have less hesitation in addressing you.

My object in writing is to offer you an inducement to recommend to me such patients as you may believe electricity (properly applied) may benefit. As it would be only just that you should participate in any profit I may derive through your instrumentality, I shall forward to you the first fee I receive in every instance, in addition to which I shall have much pleasure in allowing you 25 per cent. on the price of the apparatus supplied.

Although this may be a somewhat novel method of commencing business relations, I trust that you will see that the advantage is mutual; in any case, I hope you will consider this communication confidential.

I am, Sir, yours very truly,
HARRY LOBB.

P.S.—For the nature of the cases advantaged by electrical treatment, the apparatus I recommend, &c., I must refer you to the book. I would also call your attention to my Brighton address, where patients can combine the tonic effects of sea air with the electricity.—H. L.

(COPY.)

Harewood-place, Hanover-square, Jan. 6, 1869.

SIR,—You have sent me a letter offering, as you say, an inducement to me to send patients to you. You express the hope that I shall consider the communication confidential; but I take leave to tell you that you have no right to insult me and expect me to say nothing about it. I have, therefore, sent your letter and a copy of this to the Editor of THE LANCET, and begged him to make any use of them that he thinks proper.

You say that you can confidently refer to me in respect of patients whom you have attended. I recommend you not to do so. I have no recollection of any case in which you did the least good.

I am, Sir, yours,
Harry Lobb, Esq. JAMES PAGET.

THE ARMY MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—For some reason or other best known to the writer or writers of the articles which have recently appeared in some of the daily journals, the organisation and administration of the Medical Department have been condemned, and its officers declaimed against. You, Sir, can scarcely be accused of having concealed the defects of the present organisation, seeing that you were the first to advocate some radical changes in it. But I have no hesitation in saying that the attacks to which I refer were in many respects as incorrect in fact as they were unjust in spirit. It is very easy to characterise medical officers as ignorant and what not; but the worst of them are better than those rejected at every examination, and cast upon civil life, and the best of them are quite as good as their civil *confrères*. Be they good or bad, however, they must all possess medical and surgical diplomas before they can become candidates for army appointments. After being selected, they have to pursue and pass through a course of study at Netley, where they are *really* taught some professional subjects with which they are supposed to be already acquainted, and they acquire a practical knowledge of many others of which relatively few civilians know anything at all. They have then to undergo another test examination before being gazetted, and still another before being promoted. Now, it is perfectly absurd to suppose, with these additional protections, that among a large body of men, coming from different schools, and composed of the graduates of various universities, there should not be, relatively, as large a number of well-educated men in the service as out of it. In matters of sanitary science, at any rate, they may fairly claim to have taken a prominent position. It appears to me simply ignorance—or worse—on the part of those who charge the officers of that service with all the evils attending our present military system. India and the various colonies must be provided for, and the term of foreign service presses so heavily, that the life of a medical officer is almost one of expatriation altogether; and the prizes are as few as the risk to health and loss of life are great. The last was statistically proved by Mr. Neison, and the impairment of health from foreign service those best know who are the sufferers,—and they are very many.

The problem of discovering a method which shall offer reasonable and fair prospects to the medical officer, with a due regard to efficiency and the public interests, is a difficult one; and I believe, with the present double system of military administration by Horse Guards and War Office, with our regimental system, and the regular relief of India and the colonies, that I might fairly challenge anyone to lay down a scheme which should curtail the size of the Department, produce an equalisation of the work, or provide medical officers with a similar amount of occupation at all stations and under all circumstances alike. Have a local Indian army, and reduce your force in the colonies, and a child might effect a reduction of the Medical Department, of course. I am among those who heartily desire to see an effective and practical scheme designed and carried out; but those who know the present working best can best appreciate the difficulties; and they are equally aware that it is no fault of the medical authorities whatever if they have had neither the opportunity nor the power to propose a scheme, which they are surely as competent to sketch as any outsider can be. You said long ago that a Commission might be appointed to take the whole subject into consideration. By all means let this be done; but, for the good of the profession and the public alike, I earnestly hope, and I certainly believe, that Mr. Cardwell will not be tempted to adopt the hasty conclusions of mere theorists.

I enclose my card, in order that you may judge whether or not I am likely to be informed on what I write; and you can also judge as to how far my professional position justifies me in subscribing myself,—Yours truly,

January, 1869. AN IMPARTIAL CRITIC.

MARKINGS ON THE NAILS.

To the Editor of THE LANCET.

SIR,—In a paper which appeared in your last number on "Marking on the Nails," I said that the fact was known to many in the profession, and that I believed the subject had been treated of by writers, although I was unable to lay my hand on the references. Mr. Erasmus Wilson has now sent me the information that a description of the affection was written by M. Beau, in the eleventh volume of the "Archives Générales," and that he published an account of M. Beau's researches in his works on the skin.

I may add that when I stated I could find no reference to the subject in any of the ordinarily used books on medicine, I unfortunately had no other copy of Mr. Wilson's work by me than one of the first edition.

I am, Sir, your obedient servant,
St. Thomas's-street, Jan. 1869. SAMUEL WILKS, M.D.

REPRESENTATION OF THE MEDICAL PROFESSION IN THE GENERAL COUNCIL.

To the Editor of THE LANCET.

SIR,—As your columns are so frequently open to communications respecting the scientific progress of our profession, I will trouble you to insert a few lines concerning our social position and general welfare as practitioners of medicine. We look to the Medical Council as the governing body of the profession, and a young practitioner entering upon his career, and having paid a fee not exceeding £5, should expect at least to derive some benefit from the existence of the Council.

But it is far otherwise. The general practitioner finds that he is not even represented in the Council, it being composed only of hospital professors and men of eminence, who, understanding nothing of the requirements of general practitioners, devote the whole of their time to fruitless discussions concerning the better education of medical students, all but ignoring the general practitioner, for whose benefit the Medical Act was specially framed.

The general practitioner has much to contend with single-handed, and if he ventures to complain to the Council he generally receives an evasive reply, so that he is driven to the necessity of ventilating his grievances in the medical journals.

To take a few of the many hardships to which we have to submit:—There is, among others, the compulsory filling-up of vaccination certificates without a fee, but with the option of a penalty. The filling-up and signing death certificates in order to furnish the Government with statistics, again without remuneration. The employment of unqualified assistants, who visit, and oftentimes supersede the qualified man, while the druggist's assistant is compelled to pass an examination in order to fit him for dispensing alone. The non-representation of general practitioners in the Medical Council, and the exorbitant fee for registration, the Act permitting a much lower fee. The salaries of Poor-law medical officers, and the low charges for clubs and benefit societies. The proposed vaccination monopoly, which ought to be strenuously opposed, and each man perform his own vaccinations at the expense of the Government. Besides these there are other minor affairs that require consideration at the hands of the profession; and it appears to me that until the general practitioner has a voice in the Medical Council, he will derive no benefit from it, and it will remain a useless and expensive body.

I am, Sir, your obedient servant,

January 5th, 1869. "A MEDICAL REFORMER."

POOR-LAW INSPECTORS.

To the Editor of THE LANCET.

SIR,—I am glad to find by your last impression that the adoption of the recommendations of the Lords' Committee is likely to be urged on the President of the Poor-law Board. The Poor-law officers in the provinces would hail it as a mark of kindly feeling towards them, but pray let us have practical men—men who know the working of the Poor Law in the country, the habits of the poor, and the prejudices of the guardians. I trust Dr. Rogers will soon be on the move.

Yours obediently,

Jan. 5th, 1869. RUSTICUS.

HOSPITAL DISPENSERS AND THE PHARMACY ACT.

A MEETING of hospital dispensers, which was attended by representatives from almost all the large institutions, was held at the London Hospital on Monday evening, Dec. 14th, to consider their position under the Pharmacy Act. Mr. T. H. Tustin, Pharmaceutist to the Hospital, having been voted to the chair, a discussion ensued, in the course of which it was argued that the clause and schedule of the Pharmacy Act, which excluded all except those who have dispensed prescriptions in an open shop immediately before the passing of the Act, from registration as chemists and druggists, and from the modified examination to which assistants in shops are admitted, constitute a real and serious grievance. It was shown that almost all dispensers have served an apprenticeship to chemists and druggists, and intend to return to the business; and it was argued that the fact of their being engaged entirely in the more serious business of dispensing prescriptions, and not in the retailing of tooth brushes, perfumes, &c., as well, ought not to bar them from any benefits which may be derived from the Act. Incidentally the analogous cases of dispensers to surgeons and assistants to wholesale druggists came under discussion, and it was suggested that they should be invited to take part in a combined movement to obtain an amendment of the Act. Eventually it was decided, first of all, to address a memorial to the Council of the Pharmaceutical Society, to endeavour to learn their views on the subject; and, in the event of an opinion unfavourable to the claims of dispensers and assistants, it was decided to address petitions to both Houses of Parliament for an amendment of the Pharmacy Act. The meeting was then adjourned till Monday, Jan. 11th, to wait an answer from the Council of the Pharmaceutical Society.

Medical News.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 31st of December:—

Birt, George, Leamington.
Buckley, Samuel, Royton, Lancashire.
Fisher, Frederic Richard, Salisbury.
Giddings, William Kitto, Calverley, near Leeds.
Handy, Henry Francis, Darlaston, Staffordshire.
Morrison, John Reid, Cannon-street-road, East.
Roper, Robert Gear, City-road, E.C.
Whitcombe, Edmund Bancks, Birmingham.

THE Surrey magistrates have granted a sum of £3000 to be expended in the erection of additional single rooms for the accommodation of dangerous and violent patients, and also £500 for building a workroom for the female inmates, at the County Lunatic Asylum at Wandsworth. Alterations are also to be made in the Brookwood Asylum to meet the recommendations of the medical superintendent.

THE Royal Free Hospital, Gray's-inn-road, has received bequests of £100 under each of the wills of the late Mr. Henry Bacon, barrister-at-law, and Mr. W. L. Farrar, solicitor, both of Lincoln's-inn-fields. The last-named gentleman has also left £100 to the Cancer Hospital, Brompton.

THE proceeds of the concert given by the Duchess of Beaufort in aid of the funds of the Tetbury Cottage Hospital, which have been handed over to the trustees, amounted to upwards of £60.

THE "Gateshead Observer" states that Mr. J. C. Eno has paid to the treasurer of the Newcastle Infirmary £100 as the net proceeds of the Bellew readings in the new Town Hall.

A NEW workhouse for the Preston Union was opened last week.

DANGER OF GIVING STRONG DOSES OF CAMPHOR.—A case illustrating the above has recently been brought under the notice of the Société de Médecine et de Pharmacie de Grenoble. An enema consisting of five grammes of camphor dissolved in the yelk of an egg was given to a child three years of age suffering from typhoid fever. Symptoms of poisoning soon manifested themselves: convulsions, lividity of the countenance, stupor, arrest of the urinary secretion, &c. The employment of coffee sufficed to restore the child.

BIRMINGHAM.—The members of the Midland Medical Society have rejected the scheme for amalgamating their society and the Birmingham Branch of the British Medical Association. It was considered that the number of extra meetings offered by the branch would be insufficient. The Midland Medical Society will, therefore, continue independently. It has been decided to divide the subscribers into

two classes—viz., members and fellows,—the latter to pay one guinea per annum, if residing in Birmingham; country fellows to pay a subscription of half a guinea. The members will be composed of subscribers of five shillings, and it is hoped that many of the students will join the society as members. The meetings will in future be afternoon and evening alternately, and especial prominence will be given to pathological and clinical work. The library and reading-room of the society will be continued.

PRESENTATION.—A testimonial, consisting of Prof. Browning's astronomical reflecting telescope, equatorially mounted, with silvered glass mirror, an elegantly-embroidered velvet purse, with gold clasp and seventy sovereigns, and a beautifully-bound book, containing the names of the several contributors written on vellum, has been presented to a respected member of our profession. The inscription on the telescope, engraven on a plate of German silver, tells its own tale. The following is a copy:—"Presented to Nath. P. Betts, Esq., M.R.C.S., L.A.C., with a purse containing £70, as a token of respect and esteem from 261 of his patients and friends in Sutterton, Fosdyke, Algarkirk, and Wigtoft, and of grateful acknowledgment of his skill, and Christian sympathy and kindness in illness, and especially of his unvaried, ready, generous, and self-denying attentions to those from whom he could expect little or no return. Christmas, 1868." The presentation was made by the Vicar of Sutterton, in the National School-room, which was completely filled.

MEDICAL SOCIETY OF VICTORIA.—The following is the list of office-bearers for the year 1869:—President: Dr. Neild. Vice-presidents: Dr. Bird and Dr. Jonasson. Treasurer: Dr. Featherston. Hon. Sec.: Mr. Blair. Hon. Librarian: Dr. Nicholls. Committee: Mr. Gillbee, Dr. Black, Dr. Graham, Dr. McCarthy.

WEST COAST OF AFRICA.—By late advices from France it is to be observed that the cholera has arrived at St. Louis, the capital of the French possessions in the Senegal, the inhabitants dying at the rate of 100 a day. This is the first occasion on record of the fatal visitant having reached the West Coast. Its advent is much to be dreaded among a people so under-fed as the natives. The yellow fever has always marched from south to north along the coast-line; whereas the reverse route has been followed by the cholera, it being rife during last summer in Morocco. It is to be hoped that the authorities at the Gambia, Sierra Leone, Lagos, and the Gold Coast settlements will promptly establish Boards of Health, with full power to act summarily in removing impurities from the towns, and that our garrisons may be well supplied with medical men.—*The Times.*

Obituary.

PRINCIPAL FORBES.

WE regret to have to record the death of Professor James David Forbes, Principal of the United Colleges of St. Andrews, and Professor of Natural Philosophy in the University of Edinburgh from 1833, when Sir John Leslie died, to 1860. Since 1851 his health has been very much impaired. But before that he had done a vast amount of scientific work. His most brilliant investigations had reference to the polarisation of heat, and the laws of the formation of glaciers. Professor Forbes was not more esteemed for his scientific and academic eminence than for his various personal qualities.

Medical Appointments.

BEVERIDGE, R., M.B., has been appointed Physician to the Royal Infirmary, Aberdeen, vice A. Reith, M.D.

BOOTH, E. J. H., M.R.C.S.E., L.S.A.L., has been appointed Resident House-Surgeon to the Huddersfield and Upper Agbrigg Infirmary, vice Brewer, resigned.

BOUTFLOWER, A., M.R.C.S.E., has been appointed Junior House-Surgeon to the Royal Infirmary and Dispensary, Manchester, vice S. F. Bagnall, L.R.C.P.L., appointed Resident Surgeon and Apothecary to the Warrington Dispensary.

BOWKETT, T. E., jun., M.R.C.S., &c., has been appointed Surgeon to Out-patients at the Poplar Hospital.

CHALMERS, J., M.D., L.R.C.P.Ed., L.F.P. & S. Glas., has been appointed Police Casualty Surgeon for the Southern District of Glasgow.

CHEATLE, E., L.R.C.P.Ed., has been appointed Medical Officer for the Revesby District of the Horncastle Union, Lincolnshire, vice H. George, M.D., resigned.

COBBOLD, Dr., F.R.S., Swiney Lecturer on Geology, has been appointed Honorary Correspondent of the Academy of Natural Sciences of Philadelphia, U.S.

CORBET, D., M.R.C.S.E., has been appointed Medical Officer for the West Drayton District of the Uxbridge Union.

DEACON, W. B., M.R.C.S.E., has been appointed Medical Officer for the Deeping District of the Bourn Union, Lincolnshire, vice Wm. Page, L.S.A.L., resigned.

GALTON, T. C., M.A., M.R.C.S.E., has been appointed Clinical Assistant at the City of London Hospital for Diseases of the Chest, Victoria-park.

GERVIS, W. S., M.D., has been appointed Medical Officer for District No. 1 of the Newton Abbot Union, Devonshire, vice Andrew M'Gill, M.D., resigned.

GODSON, C., M.R.C.S.E., L.M., has been appointed Resident Obstetric Officer to St. Bartholomew's Hospital.

GREWCOCK, J. B., M.R.C.S.E., has been appointed Medical Officer for the Eckrington District of the Pershore Union, Worcestershire, vice F. Davies, M.R.C.S.E., resigned.

GRIFFITHS, L. M., M.R.C.S.E., has been appointed Medical Officer for District No. 1 of the Clifton Union, Gloucestershire, vice C. Steele, L.R.C.P.L., resigned.

HEARNE, Mr. F., has been appointed Dispenser at the St. Margaret and St. John, Westminster, Dispensary, Little Chapel-street, vice Doughty, resigned.

HILL, J. R., L.R.C.P.Ed., Medical Officer for Males at St. Pancras Workhouse Infirmary, has been appointed Medical Officer also for Females and Children, vice E. T. R. Evans, M.R.C.S.E., resigned.

KING, Dr. R., B.A., has been appointed Resident Medical Officer at the Middlesex Hospital, vice A. Stephen, M.D., resigned.

M'DONALD, G., M.D., has been appointed Medical Officer for the Norwood District of the Uxbridge Union, Middlesex.

MITCHELL, T. R., M.D., has been appointed Medical Officer for District No. 8 of the Woodbridge Union, Suffolk, vice John Rand, M.R.C.S.E., resigned.

MURRAY, J., M.D., has been appointed Medical Registrar and Superintendent of Post-mortem Examinations at the Middlesex Hospital, vice W. Cayley, M.D., resigned.

NASON, Dr., has been elected Medical Officer for No. 3 District of the Dulverton Union, vice H. J. Edwards, M.R.C.S.E., resigned.

PINDER, T. H., M.R.C.S.E., has been appointed Senior House-Surgeon to the Royal Infirmary and Dispensary, Manchester, vice Theodore Fennell, M.R.C.S.E., appointed Senior Resident Medical Officer to the Leeds Public Dispensary.

ROBINSON, R. B., L.R.C.P. & S.Ed., has been elected Medical Officer and Public Vaccinator for No. 1 District of the Dulverton Union, vice J. J. Constable, M.D.

THYER, Mr. J., has been appointed Dispenser to the Royal South Hants Infirmary, Southampton, vice Peake, resigned.

WESTMORLAND, J., L.R.C.P.Ed., has been appointed Assistant Medical Officer to the Workhouse Infirmary, Bridge-street, Manchester, vice E. Maundrell, M.R.C.S.E., deceased.

Births, Marriages, and Deaths.

BIRTHS.

CARRUTHERS.—On the 30th ult., at Marchfield House, Edinburgh, the wife of J. B. Carruthers, M.D., L.R.C.S.Ed., of a daughter.

HARLEY.—On the 25th ult., at Upper Berkeley-street, Portman-square, the wife of John Harley, M.D., of a son.

MACKAY.—On the 27th ult., at Clifton-road, St. John's-wood, the wife of A. E. Mackay, M.D., Deputy Inspector-General of Hospitals and Fleets, of a son.

MILLER.—On the 29th of Nov., at Deyrah Dhoon, India, the wife of Staff Surgeon C. M. M. Miller, of a daughter.

SHEA.—On the 24th ult., at Dorset-terrace, Clapham-road, the wife of John Shea, M.D., of a daughter.

THOMAS.—On the 28th ult., the wife of M. Thomas, M.D., Superintendent of the Glasgow Royal Infirmary, of a son.

TIZARD.—On the 26th ult., at Weymouth, the wife of Henry Tizard, M.D., of a son.

WARD.—On the 1st inst., at the Poplars, Twickenham-common, the wife of Martindale C. Ward, M.D., of a daughter.

MARRIAGES.

BATES—HILL.—On the 31st ult., at St. Mark's, Regent's-park, William Bates, M.D., of Stockport-road, Manchester, to Bertha Mary, daughter of Edwin Hill, Esq.

PRINGLE—CHISHOLME.—On the 29th ult., at Edinburgh, Robert Pringle, M.D., Surgeon Bengal Army, to Christina Madeline, daughter of the late J. S. Chisholme, Esq.

DEATHS.

ALLDAY.—On the 26th ult., F. Alliday, M.R.C.S.E., of Merthyr Tydvil, Glamorganshire, aged 54.

HAYMES.—On the 2nd inst., at Rugby, Thomas Haymes, M.R.C.S.E., of Thirsk, Yorkshire, aged 57.

LOW.—On the 2nd inst., at Martley, near Worcester, William Cook Low, M.D., L.R.C.S.E., aged 30.

RHIND.—On the 1st of October last, at La Trinidad, Ascension, James Rhind, M.D., eldest son of the late William Rhind, Esq., of Stockport, in Cheshire, and Staff Surgeon in the Army of the Republic of Paraguay.

RHIND.—On the 6th inst., at Knowle, Mirfield, William, the infant son of John Rhind, M.D., aged 5 weeks.

Medical Diary of the Week.

Monday, Jan. 11.

ST. MARK'S HOSPITAL.—Operations, 1½ P.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
MEDICAL SOCIETY OF LONDON.—8 P.M. Dr. Elliott (of Hull), "On Spontaneous Fracture of the Humerus in a Patient affected with Constitutional Syphilis" (interesting specimen).—Dr. Cordwent (of Taunton), "On a Calculus Removed from the Perineum" (with specimen).—Mr. Wm. Adams will deliver his first Lettsomian Lecture, "On Acute Rheumatic Affections of the Joints; their Pathology and Treatment."
ODONTOLOGICAL SOCIETY.—8 P.M. Annual Meeting for Election of Officers and Council.—Mr. R. Hulme, "On the Formation of a Dental Museum."

Tuesday, Jan. 12.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. Westmacott, "On Fine Art."
ETHNOLOGICAL SOCIETY OF LONDON.—8 P.M. Mr. H. H. Howorth, "On the Westerly Drifting of the Nomades from the 5th to the 19th Century."
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8½ P.M. Dr. Gull and Dr. Sutton, "On the Natural History of Rheumatic Fever."

Wednesday, Jan. 13.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
OPHTHALMIC HOSPITAL, SOUTHWARK.—Operations, 2 P.M.
HUNTERIAN SOCIETY.—7½ P.M. Council.—8 P.M. Dr. Barnes, "On the Modes of Reducing Chronic Inversion of the Uterus."
EPIDEMIOLOGICAL SOCIETY.—8½ P.M. Dr. Macpherson, "On Prof. Pettenkofer's latest Observations on Ground-water."—Dr. Hermann Weber, "On Relapsing Fever in Foreigners admitted into the German Hospital."—Mr. Radcliffe, "On Fluctuations in the Subsoil Water, Queen-square, Bloomsbury, 1868."

Thursday, Jan. 14.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. Rupert Jones, "On Protozoa."

Friday, Jan. 15.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—8 P.M. Prof. Tyndall, "On Chemical Rays and Molecules."

Saturday, Jan. 16.

ST. THOMAS'S HOSPITAL.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL FREE HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. Odling, "On Hydrogen and its Analogues."

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Notes, Short Comments, and Answers to Correspondents.

REORGANISATION OF THE ARMY MEDICAL SERVICE.

WE continue to receive letters on this subject from different correspondents; but we should be glad to have one stating *concisely* the advantages of the regimental system as it exists at present. We get opinions, and the expression of individual feeling on the subject, in abundance; but we want facts and arguments in order to reach the truth, which is our object. "A Regimental Surgeon" writes to us a long letter from India, detailing his experience during service at home and abroad—in the East and West,—on the staff and in regiments. He says that he had nothing to complain of in any way as to his position and comfort in a regiment, but that he fully recognises the advantages which would accrue from the system we have advocated of consolidating the Army Medical Department into a corps similar to that of the Royal Engineers. It would, he thinks, be more economical, and for medical officers serving in the tropics more healthy, as it is next to impossible to rise early if you must go to mess at 7.30 P.M. In India, the plan we have proposed, of giving the head medical officer the responsibility and control of all that concerns the comfort and treatment of the sick, is, he states, frequently acted upon. For instance, his senior assistant-surgeon has been in medical charge of a sanatorium, some four hundred miles away, for upwards of two years, and the junior has lately been posted for duty with another corps, their places being supplied in the regiment by two newly-arrived assistant-surgeons.

F.R.C.S., (Woolwich.)—Many thanks for our correspondent's expression of approval of the article. The investigation alluded to by the reviewer was not published. The results at which he arrived, however, were stated in consequence of their having been determined independently, and their manifest bearing upon the subject. Where the infant's disease has been acquired through the parents, the mother probably never becomes infected by the infant, although another and healthy nurse is very liable to be so. The immunity of the mother may be referred to the law that syphilis does not usually repeat itself in the same body; and in such cases she has already suffered from the disease either during the last or a previous pregnancy.

WE learn from the *Liverpool Albion* that at the meeting of the West Derby guardians on Wednesday week last, the medical officer, Dr. Fitzpatrick, called attention to a case in which he had ordered certain "necessaries" to a sick man, which had not been supplied, according to instruction, by the relieving officer. The Clerk informed the Board that the relieving officer was not bound to attend to the directions of the medical officer, but would be held responsible if anything serious were to arise. The Board, after some discussion, approved (!) of the course pursued by the relieving officer in his partial disregard of the medical officer's orders.

B.—The circular is in very bad taste.

THE *Builder* suggests for local consideration that Plymouth, Devonport, and East Stonehouse should be formed into one district, with one medical officer of health. The suggestion is good, and we hope it will be adopted.

THE VICTORIAN MEDICAL BENEVOLENT ASSOCIATION.

OUR Australian brethren founded about three years since an Association in Melbourne for the relief of distressed members and relatives of the profession, and we learn from a Report of the Committee that the results which have attended the experiment—of course on a small scale—are not a little gratifying. In fact, a stage has been reached which justifies the promoters in believing that the institution will now be a permanent success. The Committee take every means to ascertain the true deserts of applicants for relief, and the way in which they have performed this part of the duties no doubt explains the favour with which the Association is regarded. The following are examples of the kind of relief given:—

"1. The widow of a L.R.C.S. Ed. of 1846, who had practised in Melbourne and on the gold-fields from 1855 to 1860. This case, on inquiry, was found to be a particularly deserving one, and the applicant was granted the sum of £3 to enable her to commence a small school in one of the suburbs.

"2. The widow of a L.S.A., lately deceased, who had practised in a locality about twenty miles from Melbourne. The widow had been left with five children, the youngest only five months old. She was granted £2 10*s.* to assist in enabling her to open a school.

"3. A M.R.C.S. of 1865, and L.R.C.P. Ed. of 1866, who had lately practised in New Zealand, applied for temporary assistance pending the arrival of a sum of money from that colony. He was granted a loan of £2 5*s.*, part of which he subsequently repaid, and this loan afterwards enabled him to apply for a situation as assistant-surgeon to one of the hospitals on the gold-fields, which he obtained and still holds.

"4. The daughter of a deceased M.R.C.S.E., formerly practising in one of the suburbs, was granted £5 to enable her to pursue her studies in preparing for examination as a teacher under the Common Schools Act.

"5. The widow of a M.D. Glasg. 1830, lately deceased, was granted £10 to enable her to open a boarding-house in one of the suburbs."

These instances speak for themselves. The Association deserves greater support.

A Surgeon's Assistant.—1. There is no qualification of the kind.—2. The Vaccination Act does not touch the case mentioned by our correspondent.

Medical Student.—We know nothing of the person mentioned.

RELIEF OF VAGRANTS.

A CIRCULAR letter has been issued by the Poor-law Board, drawing the attention of the guardians to the present system of relieving vagrants, and suggesting several reforms. The name and occupation of each applicant, with the place whence he comes, and the place to which he is going, is to be recorded in a book of reference; but how this will enable the officers to distinguish between professional tramps and the genuine wayfarer we do not know, unless a copy of the register is sent daily to the County Police Office. No man can determine by one examination whether a tramp is really able to work or to walk a given distance—that is, whether he be a genuine traveller or not,—and the tramp, knowing this, is master of the situation. But he cannot deny his habits if they are recorded and sent to a central office. With such information the police would be able to prove a violation of the vagrant laws, and detain the professional tramp, which is the only punishment he really cares for. Without this central registration, we fear that the excellent regulations for uniform treatment now issued will lead rather to the more equable distribution of tramps than to their repression.

Dr. Sisson.—We should like to hear Mr. Jay's account of the case. As the facts are represented by our correspondent, Mr. Jay is decidedly in the wrong in two respects: first, in interfering with a patient under the care of another medical man; and secondly, in not answering a letter of complaint.

THE new Civil Service magazine, *Under the Crown*, has some good points—notably the papers by Tom Taylor, W. R. Greg, and Dr. Phipson. But why bring it out under so obvious a disadvantage as is implied by its cover, the design whereof may be briefly described as "two upright posts with a cross-beam and a dependent spirit-label"?

A Constant Reader.—1. Consult a registered medical practitioner.—2. The amount varies.—3. Certainly not.

W. A. K.—The works named are well suited for the purposes required.

THE RELATION OF WET SUBSOIL TO PHTHISIS.

To the Editor of THE LANCET.

SIR,—In THE LANCET upon several occasions the discovery of the relation between wet subsoil and phthisis in England has been attributed to Dr. Buchanan, and most markedly has this been done in your last number. Such, however, is not the fact, as will be seen from a perusal of the enclosed pamphlet, p. 17. In 1865, when Dr. Buchanan, as Inspector from the Privy Council, called upon me for information as to the results of sanitary works at Salisbury, I specially called his attention to the great reduction of phthisis here, and explained to him my theory, that the cause of such reduction was the drying of a very wet subsoil by drainage. At that time Dr. Buchanan *had no knowledge upon the subject*. I asked him to investigate it, and I have now before me a letter received from him *some months afterwards*, in which he writes: "As in several other towns where good sanitary work has been done I do not find any such great reduction, perhaps *it would not be safe to insist on the effect of your sanitary operations in reducing the phthisis mortality*." By subsequent inquiries Dr. Buchanan found the fullest corroboration of my theory of wet subsoil causing phthisis. Clearly, then, the accounts hitherto published of this discovery having been made by Dr. Buchanan are quite erroneous; for so far from it having emanated from him, the letter quoted is a distinct proof that he, at first, doubted the fact.

Having originated the Salisbury drainage works, and thus, by experience, founded as well as noted this very important discovery in England, are facts which I think fairly entitle me to ask you to set this matter prominently and permanently before the public.

I am, Sir, your obedient servant,
A. B. MIDDLETON, M.R.C.S. Eng.

The Close, Salisbury, January 4th, 1869.

*** We give Mr. Middleton the opportunity of asserting a claim to priority, but really do not quite comprehend its nature. He has sent us a pamphlet, dated 1868, in which are reproduced the accounts he gave in certain communications formerly made by him to the local press, of sanitary improvements in Salisbury, including the diminution in the fatality of phthisis. Mr. Middleton will forgive us for saying that no evidence is forthcoming to show that he traced or stated the existence of any such connexion between consumption and wet soil as he now declares he told Dr. Buchanan. But in a postscript to the pamphlet, the date of which must be subsequent at any rate to the publication of Dr. Buchanan's Report to the Privy Council, Mr. Middleton quotes Dr. Buchanan's results, and the opinion is strongly stated that the Salisbury phthisis rate has diminished because of the drainage of the town. We gather from the pamphlet itself that Mr. Middleton rather attributed it before to general improvement in sanitation; for he gives as the cause of consumption "mainly humidity and nastiness of atmosphere caused by canals and cesspools." To invent a theory is one thing; to prove its truth is another. We fail to find that Mr. Middleton has adduced evidence to show that the reduction of phthisis in Salisbury or anywhere else was due to the removal of soil water specially. It is, moreover, evident that Dr. Buchanan at the outset did not rest satisfied with the apparent proof of his position furnished by a solitary town, and withheld his judgment until he had obtained experience in those places in which the connexion between subsoil and phthisis could be traced.

GRESHAM LECTURES.

THESE lectures will be continued on the 13th, 14th, and 15th of the present month at the Gresham College by Dr. E. Symes Thompson, who selects as his topic the "Influence of Occupation on the Health and the Eye."

G. F. K.—As far as we know, the institution is a *bond-fide* one.

DR. GULLY, OF MALVERN, ON ANIMAL MAGNETISM.

WE owe an apology to Dr. Gully for not sooner than this noticing a remarkable lecture for the entertainment and instruction of the working men of Malvern, and to our readers for not sooner placing before them the cases and statements of Dr. Gully. These cases and statements are remarkable not only in themselves, but for their conspicuous absence in all scientific works. It is painful to think that while Dr. Gully related the cases, the audience seemed more moved to merriment and laughter than to grave reflection. We should be disposed to censure the audience for this indecorum were it not that Dr. Gully's own narrative shows that he is gifted with such peculiar powers over other people as to make them but little responsible either for their manners or their movements. It will be seen what power Dr. Gully can exercise over ladies at a distance through the medium of amber beads. It is true that working men are not so sensitive to beads and amber as are ladies; but we should gather that they were not the whole audience of the doctor on the occasion of his lecture; and even if they were, we think it scarcely fair to judge them harshly for behaving somewhat strangely in the presence of such a magnetic influence as Dr. Gully evidently is. As we wish to give our readers the benefit of Dr. Gully's experience rather than our own comments, we say no more. We only remark that the doctor shows that peculiar preference for Mesmer to Walshe, and Faraday, and Matteucci, and Pacini, which generally is associated with hydropathy and other peculiar forms of practice. He says:—

"As the magnet might lose its peculiar power, so might the human body; and when a man had lost his magnetic power, another might restore it to him. Those were the results of the experiments made during the last sixty years. The phenomena could not be ascribed to imagination. He could quote many instances in which it was impossible to suppose that imagination had anything to do with it. He remembered the case of a distinguished man who came under his care seventeen years ago. The man, who was an oddity, was dying when he came to him. He (the dying oddity) had a devoted wife, but he would not allow her to attend to him, and he said he would rather have died forty deaths than be mesmerised. (Laughter.) His wife mesmerised him one day, when he was asleep, and all his love returned (laughter), but he lived only three weeks afterwards. (Loud laughter.) That fact proved that the results were not to be ascribed to imagination; for there was a sleeping man whose affections had ceased towards his wife, and all his love returned by the effects of mesmerism. (Laughter.) There was a lady at one time under his care, who was suffering from paralysis of the loins. He (Dr. Gully) magnetised her, and under its influence she could walk when he held her hand; but if anybody else touched her, it threw her into violent convulsions. (Laughter.) He magnetised her for some months, and she went home; but she could not sleep without his magnetism. (Renewed laughter.) He got some amber beads, an excellent conveyer of electricity, and sent them to her by post. She had only to put them into her hand, and she would go off to sleep. (General merriment.) One day he was in a hurry to go away somewhere, and he happened not to post them himself. He told an amanuensis, whom he had at that time, to put them in an envelope and post them—the beads having been previously placed in a silk bag, and enclosed in a box. By return of post he (Dr. Gully) received a letter from the lady, stating that she knew that some hand besides his had touched the beds; for the moment she put them into her hand she went into convulsions. (Laughter.) He spoke to his amanuensis on the subject, and the *employé* said it was quite right; he had had the indiscretion to open the box. She had no knowledge of that. Thus it was proved that the result through the medium of the beads was just the same as when he himself was present. (Laughter.) They might laugh at these facts; but the most potent agencies in the animal world were the most subtle. All the great phenomena in the animal world went on by means of molecules, and the agency which kept those molecules going must be of the most subtle character. It was absurd to laugh at the results of a mysterious and subtle agency. Laughter proved nothing, and it was generally the most ignorant who indulged in it. People should not laugh until they had inquired. When they laughed at animal magnetism, they should remember that it was something far more subtle than magnetism which kept the world in its orbit. He advised them not to laugh at animal magnetism, but to direct their attention and those of their friends to it as a remedial agent. (Applause.)"

In the first case the mesmerism seems to have been killingly successful. Not only was the fine passion of love restored, but restored in such quantity as apparently to kill the unfortunate patient in three weeks. "'Tis said," Wordsworth puts it truly, "that some have died for love." But the case of the beads puts the case of the "dying oddity" into the shade, and fills one with indignation at that meddling amanuensis who opened the bead box, and threw the unfortunate lady into fits.

Gloriana.—We advise our correspondent to consult his medical attendant on the points mentioned.

A CAUTION.

To the Editor of THE LANCET.

SIR,—I think by giving the description of a thief, who is now on his rounds, it will act as a timely warning to medical men. He obtained admission to my consulting room during my absence, and the short time he was there managed to pocket a midwifery case and several other small articles. He is a tall man, reddish whiskers and moustache, blue eyes, and very florid complexion. He wore a thick double-breasted frock coat, buttoned over, and light trousers.

I am, Sir, yours truly,
Inverness-road, Bayswater, Jan., 1869. WM. WIGMORE, M.R.C.S.E.

A Young Surgeon and Physician wishes to be informed whether there is any probability of the second volume of Cooper's Surgical Dictionary being published. Also when the new edition of Watson's Practice of Physic and of Pirrie's Surgery will be out.

Iatros.—There is no medicament for actually preventing the change indicated.

A Physician.—Thomson's Domestic Management of the Sick Room.

THE AUSTRALIAN MEAT QUESTION.

IN consideration of the great distress which prevails in this country at the present time, and the probability of its increase, the supply of meat from our Australian colonies becomes a most important question. A meeting took place at Norton Folgate on the 29th ult., at which this subject was practically discussed by various gentlemen connected with the colonies and some of the metropolitan medical officers of health. There is no doubt as to the power of Australia to afford a plentiful supply if the difficulty attending its transport to this country can only be surmounted. The specimens of meat presented at the meeting were said to have been excellent. The meats are packed in large iron cases, holding about two tons and a half. Sheep are packed whole, without bone, and cured; and when the iron case is filled with the meat, boiling fat is run into the case, which is then hermetically "sealed" for exportation. The manner of exporting the beef is the same, and it comes to this country in good condition. Although the meat is without bone, it is sold at a less price than that in the London market when weighed with bone. It was stated that experiments were being made in order to bring frozen fresh meat from Australia to Europe. Mr. Tallerman, on behalf of the shippers of the meat, stated that stores had been opened for the retail sale of the meat in Norton Folgate; and, in order to clear away difficulties, receipts for preparing and cooking the food were given to the purchasers. We can, in common with everybody else, only hope that success may attend the undertaking. Cheap meat, of good quality, would be an immense boon to the poorer classes, many of whom must experience extreme difficulty in procuring animal food at all.

Sanitas.—The letter of "J. B." in Wednesday's *Daily News* discovers simply a mare's nest in regard to the assumed omission of the area of the City from the general plan of metropolitan drainage. The sewers to which he refers (Fleet, Dowgate, Walbrook, and London-bridge) still discharge into the Thames, for the simple reason that the intercepting low-level sewer is not yet completed so as to connect with the northern outfall system. "J. B.," therefore, fails to surprise us, if he succeeds in astonishing (as he assumes he will do) "all other editors whose head-quarters are contiguous to the Thames" by his discovery.

Dr. Thos Thomson.—In the *Social Science Review*. Sir James Simpson's paper was read at the meeting of the Social Science Association at Belfast in 1867.

Mr. M. Montefiore.—Thanks.

O. O.—If the imbecile is in charge of a person who keeps her for profit, a licence is necessary, and our correspondent should apply to the Lunacy Commissioners without delay.

Mediens (Brighton) will find a letter on the subject in another column.

LONGEVITY.

To the Editor of THE LANCET.

SIR,—Dr. Allbutt, after considerations of philosophic profundity, has explained his views as being so much in accordance with my own that I should gladly have made use of his language were I gifted with the same poetic faculty.

I remarked that most men do not die simply of age, but fall victims to adverse circumstances, to accident rather than to time. Dr. Allbutt, as the champion of time, makes full allowance for the action of circumstance. He admits that "perhaps none of us die of ourselves alone," and embodies this view in a parable, likening the span of human life to an innings at cricket, in which we have to stand up against such bowling that few of us carry our bats out. While Dr. Allbutt allows thus fully for assaults from without, I as freely admit that death may work from within; trace the footsteps of time in hereditary disease, and in the body of a syphilitic infant recognise a victim of age.

Before quitting the subject, I may allude to a letter from Mr. DIXON, in which he urged most truly and forcibly the fallacious nature of many of the stories of long life. I am fully aware of this, and nothing was further from my purpose than to constitute myself the defender of the unsupported statements which pass current upon the subject of longevity.

In conclusion, let me revert again to the pathological aspect of the question, and ask any of your readers who are able to grant me such a favour, to give me the means of examining the tissues of any person who has survived ninety years. Your obedient servant,

Chesterfield-street, May-fair, Jan., 1869. W. H. DICKINSON.

Expectans.—So far as our information goes, it appears that the Royal Sanitary Commission has not yet recovered from the state of disorganisation into which it has been thrown by the appointment of some of its original members to posts in the Ministry. A new Chairman has to be selected, and we understand that the Marquis of Salisbury and Mr. Gathorne Hardy are the favourites by choice for that post. We want to see the Commission get to work without more ado.

Dr. Bryan.—The pressure on our space has unfortunately delayed the publication of the case.

CHRISTMAS TREES IN HOSPITALS.

FOLLOWING a now very general custom, several of the hospitals have given the patients the treat of a Christmas tree or *fête*. This was the case at Charing-cross Hospital on Wednesday last, and at the Children's Hospital a few days since.

Beta.—A L.S.A. London can practise as an apothecary, and keep open shop, anywhere in Great Britain.

Dr. Russell, (Neath.)—Please send us the account to be given by Dr. Ryding to the next meeting of the Board.

Dr. Greenhalgh (Stockport.)—The subject shall be inquired into.

METROPOLITAN ASYLUMS.

THE *Builder* states that plans are now before the Poor-law Board for their approval for Fever and Small-pox Hospitals, to be erected for the accommodation of about 130 and 90 patients respectively at Stockwell. Designs are being prepared for a Sick Asylum, to accommodate 600 patients, for the Newington district, to be erected at Peckham Rye. The Lambeth authorities have also invited designs for a similar building. For the Fever and Small-pox Hospitals at Homerton, premiums have been awarded for designs, the best having "some excellent points," the *Builder* says. Thus the staircases leading to the upper wards are entirely separated from them by a gallery open on both sides; the "administration," which forms the centre of each hospital, is well away from the wards, and is divided into four distinct blocks of building—the medical and official, the attendants, the store and kitchen, and the laundry departments,—all unconnected except by the ground floor corridor, opening on both sides if required. The plan of the Small-pox Hospital provides for two pavilions for each sex, radiating from the two ends of a short corridor, the administrative blocks (divided into four) being in the centre. The instructions for these designs prescribe pavilions not more than two stories in height; 2000 cubical feet space per occupant; impervious cement for the walls; open windows reaching to the ceiling; ventilating stove-grates to bring in fresh warmed air; outlet shafts; iron staircases; and that no expense is to be incurred for ornamental work.

Mr. J. Brown.—The penalty on persons selling articles of food and drink, knowing the same to be injurious to health, is not to exceed £5, together with costs attending the conviction; and if any person convicted shall afterwards commit the like offence, the offender's name, place of abode, and offence may be published, at his expense, in such a manner as may seem desirable.

Inquirer.—We think not.

ONE of the reporters of the *Glasgow Herald*, in a visit to Malin Head, the northernmost point of Ireland, has fallen in with a medical man whose practice embraces an area of fifty-seven square miles, having a population of 10,000: "Every family in that vast tract," says the writer, "having a claim upon his services, one was quite prepared to hear that often for forty-eight hours together he could not find time either to eat or sleep."

Mr. R. W. Goldie.—1. Jeaffreson's Book about Doctors.—2. Grossmith's, Fleet-street, E.C.

Nunquam.—All registered pharmaceutical chemists are exempted from serving upon juries or inquests.

SUTURES IN SCALP WOUNDS.

To the Editor of THE LANCET.

SIR,—I have much pleasure in endorsing the experience of Dr. L. Porteous in the treatment of scalp wounds. While assistant-surgeon at the Portland Convict Prison, I had a large number of wounds of the scalp under my care, and in the majority of cases adopted the wire suture with good results.

At the Silvertown Iron-works I had still greater opportunities of treating such injuries, and employed sutures in nearly every case, chiefly from the success obtained on former occasions, but partly owing to the insuperable objection entertained by the men to having their hair sufficiently removed for the purpose of obtaining a firm purchase with strapping. Adhesive plaster was of little use amongst the boys, who frequently removed the dressing immediately on leaving the surgery, to satisfy their companions as to the nature of the injuries received.

Through the courtesy of Messrs. O. Vincent and Case (late house-surgeons to the Middlesex Hospital), I was enabled to watch several very severe cases of scalp wounds treated by sutures with the best results.

After the consideration of several hundred cases I have arrived at the following conclusions:—

1st. That the employment of metallic sutures in scalp wounds is less liable to induce erysipelas and sloughing than strapping with adhesive plaster.

2nd. That by their use we are enabled to bring and *preserve* the edges of the wound in most perfect apposition, dispensing with much of the heavy strapping and bandaging in common use.

Lastly. That should an inflammatory blush appear at the edges of the wound, or much tension on the sutures ensue from suppuration or otherwise, their removal may be had recourse to forthwith.

I am, Sir, yours, &c.,

HORACE BASAN,

Resident Surgeon to St. Marylebone General Dispensary.

January 5th, 1869.

THE paper of *Dr. Charteris* is in the hands of the printer. The reference in regard to "authentication" in last week's issue did not apply to our correspondent, as imagined.

SCULTETUS AND HIS BANDAGE.

Dr. Bolton, of the Infirmary, Newcastle-on-Tyne, in kindly answering a correspondent, only does justice to Scultetus in the following notes:—

"'Scultet's (*sic*) Bandage' in Smith's Minor Surgery is orthographically incorrect. Cutler on Dressing and Bandaging illustrates the bandage of Scultetus for fractures of the femur. (Synonyms—Many-tailed Bandage; Bandage à Bandalettes Séparées. Fr.) We are also indebted to Scultetus for the hoop cradle used in cases of fracture of the thigh and leg. I would refer your correspondent to Heister's Surgery (1743), or to the Armamentarium Chirurgicum of Scultetus, 4to (1666), for a fuller description of bandage and cradle. Both are in constant use in hospital practice, and poor Scultetus is never associated with either."

P. C. S. should give notice of his loss to the licensing body from which he obtained his diploma. The fact of the name of our correspondent appearing in the Medical Register would, no doubt, suffice as regards the obtaining of a public appointment.

SANITARY STATE OF STAMFORD.

THE MARQUIS OF EXETER presided at a meeting held in this town last week for the purpose of considering what should be done to improve its sanitary condition. The system of cesspools in the porous limestone formation was admitted on all hands to be a source of constant danger as affecting the water-supply. Lord Exeter stated that round his house at Burghley there were eight cesspools, and when they were opened nothing was found in them, the contents having disappeared through the rock; and he had no doubt that to this cause was attributable much of the sickness from which the servants and children had suffered, because since he had substituted drains for cesspools the servants had become much more healthy, "and an oppressive feeling which seemed to hang about the house had been removed." Although a good deal was said during the discussion of the subject to create a feeling adverse to the adoption of sanitary works, on the ground of their expense, the meeting adopted resolutions affirming the necessity of such works, and calling on the Town Council to carry out the Sanitary Act.

Omega.—The son of a deceased medical man, if not provided for, is eligible for admission to the Medical Benevolent School, the election to which is by votes of subscribers, and involves unfortunately considerable expense in printing, postage, &c. Write to the Secretary, 37, Soho-square. If the widow is in immediate and urgent want, apply to the Secretary of the Medical Benevolent Fund, Dr. Broadbent, 44, Seymour-street, Portman-square.

THE NEW PHARMACY ACT.

To the Editor of THE LANCET.

SIR,—The Pharmacy Act of last session will be the cause of great annoyance to medical men. As an illustration of this, I may name a circumstance which occurred to myself.

Having a tedious midwifery case in Leadenhall-street, I went to a druggist, Mr. Brown, of Aldgate, for a little ergot to give my patient. Not having any, he recommended me to apply to a Mr. Constance, of Leadenhall-street; and going to this shop, I was immediately told by the manager (as he styled himself) that he could not supply me, as it was contrary to the Pharmacy Act. I told him who I was, and that Mr. Brown (who had known me for twenty years) sent me. He replied he declined serving me. I stated to him I believed the Act did not come into force until January, 1869. Still he would not give me the ergot. At last he condescended to say if I would go to Mr. Brown, and bring a note from him, he would serve me. Urgently requiring the drug, I went to Mr. Brown again, and he kindly furnished me with a note, requesting I might be served, on presentation of which I was attended to.

Now I ask, Mr. Editor, if this is the way medical men are to be served when wanting some scheduled drug in the middle of the night, and to be met as I was? I leave your readers to imagine themselves in the hands of a person like the manager of Mr. Constance's business in the dead hour of the night, and urgently needing a drug scheduled by the Act, to either mitigate the sufferings of some fellow-creature, or perhaps save life, and this Act of Parliament steps in to prevent any such humane effort from being made. I think the Medical Council should at once see to this Act, and seek its amendment.

Yours respectfully,
Hackney, December 30th, 1868. R. BENTHAM, M.D.

A Candidate writes to complain that though a month has elapsed since the last examination in Arts at the College of Surgeons, no list of successful candidates has yet appeared. The examination is, we believe, conducted by the College of Preceptors, and it certainly seems remarkable that a longer time should be occupied with a smaller number of candidates than at the matriculation examination of the University of London, where also the candidates have to be "classed."

A. B.—At University College.

Mr. Mortimer's statement is not correct. The gentleman's name is in the Medical Directory for 1868.

EXCESSIVE SNEEZING.

To the Editor of THE LANCET.

SIR,—In answer to the inquiry of "Beta" in your last impression, I beg to inform him that I have found immediate relief following the inhalation of spirits of camphor, applied by placing a drachm in the palms of the hands, and directing the patient to inhale the vapour thus arising. I may say that I have never found this remedy to fail.

Yours obediently,
Osnaburgh-street, Jan. 4th, 1869. I. N. JAKINS.

To the Editor of THE LANCET.

SIR,—Has "Beta" tried the plan of pressing the tip of the forefinger firmly on the upper lip, immediately below the middle of the nose, and keeping it there while the inclination to sneeze continues?—Yours truly,
January 5th, 1869. ALPHA.

To the Editor of THE LANCET.

SIR,—Your correspondent, "Beta," will, I think, find good results from the use of chloroform (inhaled) in his case of "excessive sneezing," especially where the "general health is so much improved."—Yours, &c.,
January 6th, 1869. DIOGENES.

SUBDUED LIGHT IN THEATRES.

A CORRESPONDENT writes:—"You would do a good service to the theatre- and concert-going public if you would call attention at this season to the state of places of public entertainment, which are crowded, and every breath of air carefully excluded, rendering the atmosphere inhaled by so many persons packed closely together all the more vitiated. If people knew the comfort of 'subdued light' and moderately heated rooms, the pleasure held out to visitors would have less present annoyance and after-suffering attached to it."

THAMES VALLEY DRAINAGE.

WINDSOR and Eton are to be drained on the plan of the separate system, as recommended by Colonel Ewart, R.E. The cost is estimated at £16,000.

Observer.—The letter is, no doubt, objectionable; but at this season of the year must be excused.

Mr. Anthony C. Foster's case shall receive the earliest possible attention.

SEVERAL of our correspondents have complained of the lateness of the publication of our last week's number. The delay, which was unavoidable, is explained by the fact that the type was entirely new, thus entailing great additional labour, and that at the same time the number itself contained a supplement of eight pages.

EVERY communication, whether intended for publication or otherwise, must be authenticated by the name and address of the writer. Papers not accepted cannot be returned. Articles in newspapers, to which attention is sought to be directed, should be marked. Communications not noticed in the current number of THE LANCET will receive attention the following week.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Greenhalgh; Mr. Paget; Dr. Wilks; Mr. Brodhurst; Dr. Ramskill; Dr. Sydney Ringer; Dr. Braxton Hicks; Dr. Anstie; Rev. W. Kirkus; Mr. Worth, Millbrook; Dr. Charteris; Mr. Barton; Mr. Owen; Dr. Oppert; Dr. Carruthers, Edinburgh; Dr. Phillips; Mr. Riggall; Mr. Jack; Mr. Hamlya; Dr L. O. Fox, Broughton; Dr. Hartley, Halifax; Dr. Harrison, Walsall; Dr. Tylecote, Sandon; Mr. Crick; Dr. Browne, Everton; Mr. Southam, Manchester; Mr. Galton, Exeter; Dr. Bell, Cockermouth; Dr. Doyon, Lyons; Dr. Lowe, Lynn; Mr. C. J. Fox; Mr. Taylor, Broadstairs; Mr. Bowkett; Mr. Curtis; Dr. Slyman, Newtown; Rev. J. Branch; Dr. Chalmers, Glasgow; Dr. Jones, Rhyl; Dr. Thomas, Cyfartha; Mr. Horner, Sheerness; Dr. Gore, Limerick; Dr. Eastwood, Sheffield; Dr. J. Murray; Mr. Wigmore; Mr. Booth, Huddersfield; Mr. Mackaye, Ardgay; Mr. Tomson, Luton; Rev. C. A. Moore, Spalding; Dr. Harding, Whittlesea; Mr. H. Bassn; Dr. C. S. Smith, Liverpool; Mr. Pincott; Mr. Knott; Mr. Hendley; Mr. Little; Dr. R. King; Mr. Everett, Oldham; Dr. Farrow, Ingham; Mr. Cooper; Dr. Newhouse, Birmingham; Mr. Spencer; Dr. Willshire, Erfurt; Mr. Handcock, Leeds; Mr. Poole; Dr. Warburton, Carlisle; Mr. Greame, Forfar; Mr. Bernard, Bristol; Dr. Goldie, Withington; Dr. Knipe, Malvern; Mr. MacDonnell; Dr. Rhind, Trinidad; Dr. Coats; Dr. Murphy; Sir W. Croslin; Mr. Vachez, Birkenhead; Dr. Tennant, Newbottle; Dr. Watson, Creetown; Mr. Tallan; Mr. Mortimer; Dr. Soffe, Thetford; Dr. Brunton, Redditch; Mr. Grose, Woolwich; Dr. Sexton, Kurrachee; Dr. Jennings, Coleford; Mr. Sewill; Dr. Herbert, Ashton-under-Lyne; Mr. Byford, Chicago; Dr. Woodhouse, Hertford; Dr. Miles, Gillingham; Mr. Pope, Stepney-green; Mr. Coleman; Messrs. Higgins and Earlam, Abbots Bromley; Mr. Hewitson, Allenheads; Dr. Reynolds, Arlington; Mr. Hughes; Mr. Godson; Dr. Tuson, Glasgow; Mr. Greenway; Dr. Thomas, Bronphillip; Mr. Henderson; Dr. Morris, Blackpool; Dr. Roberts, St. Asaph; Dr. Tizard, Weymouth; Dr. Moxon, Carnarvon; Dr. Black, Glasgow; Mr. Neville, Southampton; Dr. Cobbold; Mr. Wall; Mr. Middleton, Salisbury; Mr. Lane; Dr. Wilson, Lanchester; Dr. Cullinan, Ennis; Dr. Jayallar, Ahmedabad; Dr. Jakins; Mr. Pratt, Poole; Mr. Constable; Dr. Gill, Manchester; Dr. Johnston, Sheffield; Dr. Hollingsworth; Dr. Meymott, Ludlow; Messrs. Fannin & Co., Dublin; Mr. Steeds; Dr. Ritchie; Dr. Cooke; Mr. Griffith; Mr. Kingsdown, Iver; Dr. Blaker, Portland; Mr. Colthurst, Keynsham; Mr. Davies; Mr. Brook; Mr. Kerr; Dr. Broadbent; Mr. Coales; Mr. Hill, Newport; Dr. Robertson, Doncaster; Dr. Davis; Mr. Moss; Dr. Sumpter, Cley-on-the-Sea; Dr. Fryer, Manchester; Mr. Warner; Mr. Shield; Dr. Sisson; Mr. Kelly; Mr. Neal; Dr. Jones, Saxmundham; Mr. Dennant, Brighton; Dr. Bulmer, Hackney; Mr. Yarrell, Skibbereen; Dr. Walker, Bordighera; Mr. Wright; Dr. Ryley, Sandy; Mr. Black, Thurso; Mr. Somerville; Mr. Hughes, Parsonstown; Mr. Maclean, Calstor; Mr. Fenton; Mr. Hills, Totnes; Rev. Mr. Wilson; Dr. Russell; Mr. Sutton; Mr. Anthony C. Foster; Ethnological Society; Royal Institution; M.D.; A General Practitioner; An Old Subscriber; M.R.C.S. Eng.; G. R. W.; A Member; L.S.A.; A. B. C.; D. M.; E. R. S.; Secretary of the Medical Benevolent Fund; Iatros, Liverpool; Fair Play; Omega; Georgiana; Medicus; A Constant Reader; J. R.; Beta; Alpha; Curate; Inquirer; A Medical Reformer; Diogenes; A Candidate; W. B.; A Surgeon's Assistant (unqualified); Medical Student; A Brightonian; The Principal of King's College; W. A. K.; B. O.; F.R.S.; D. A. W.; B.; P. C. S.; A late Poor-law Surgeon; A. C. J.; T. J.; An Assistant; W. W.; An Anti-Tobacconist; A Northern Subscriber; An Army Surgeon; &c.

Nottingham Journal, Glasgow Herald, Liverpool Daily Courier, Sostonian, Derbyshire Advertiser, Oldham Chronicle, Public Health, Brighton Gazette, Eastern Province Herald (Port Elizabeth), *Newark Advertiser, Spectator, Bolton Chronicle, Newbury Weekly News, Bucks Herald, Lincolnshire Chronicle, Gateshead Observer, Liverpool Albion,* and *Oldham Standard* have been received.

TERMS FOR ADVERTISING IN THE LANCET.

For 7 lines and under	£0	4	6	For half a page	£3	12	0
For every additional line	0	0	6	For a page	5	0	0

The average number of words in each line is eleven.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday; those from the country must be accompanied by a remittance.